

NACOmatic

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Kindle-DX Index; by-City, by-AptID

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DC Mins - Alternates #3 - 5

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INSTRUMENT APPROACH PROCEDURE CHARTS

A **IFR ALTERNATE AIRPORT MINIMUMS**

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS
ABINGDON, VA

VIRGINIA HIGHLANDS **LOC Rwy 24**
RNAV (GPS) Rwy 6
RNAV (GPS) Rwy 24
VOR/DME-B

NA when local weather not available.
Category C, 800-2¼; Category D, 800-2½.

ANNAPOLIS, MD

LEE **RNAV (GPS)-A**
NA when local weather not available.

BALTIMORE, MD

BALTIMORE-WASHINGTON INTL
THURGOOD MARSHALL **ILS or LOC Rwy 15L¹**
ILS or LOC Rwy 28²
VOR Rwy 10³

¹ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

²ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼.

³Categories A,B,1200-2; Category C,D 1200-3.

MARTIN STATE **LDA Rwy 33¹²**
LOC Rwy 15¹
VOR/DME or TACAN Z Rwy 15³

¹NA when control tower closed.

²NA when local weather not available.

³Categories A, B, 900-2; Category C, 900-2½; Category D 900-2¾.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY
EXECUTIVE **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30

NA when local weather not available.

NAME ALTERNATE MINIMUMS
CHARLOTTESVILLE, VA

CHARLOTTESVILLE-
ALBEMARLE **ILS or LOC Rwy 3¹²**
RNAV (GPS) Rwy 3³⁴
RNAV (GPS) Y Rwy 21³⁵
RNAV (GPS) Z Rwy 21³

¹NA when control tower closed.

²ILS, Categories A, B, C, 800-2; Category D, 800-2½. LOC, Category D, 800-2½.

³NA when local weather not available.

⁴Category D, 1000-3.

⁵Category C, 800-2¼; Category D, 1000-3.

COLLEGE PARK, MD

COLLEGE PARK **RNAV (GPS) Rwy 15**
NA when local weather not available.

CULPEPER, VA

CULPEPER RGNL **LOC Rwy 4¹**
RNAV (GPS) Rwy 4²
RNAV (GPS) Rwy 22²
VOR-A²

¹NA when FBO closed.

²NA when local weather not available.

DANVILLE, VA

DANVILLE RGNL **ILS or LOC Rwy 2**
RNAV (GPS) Rwy 2
RNAV (GPS) Rwy 20
VOR Rwy 2
VOR Rwy 20¹

NA when local weather not available.

¹Categories A, B, 1000-2; Category C, 1000-2¾; Category D, 1000-3.

DUBLIN, VA

NEW RIVER VALLEY **VOR or GPS-A**
Category D, 800-2¼.

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ALTERNATE MINS

M2

NAME ALTERNATE MINIMUMS

EASTON, MD

EASTON/
NEWNAM FIELD **ILS or LOC/DME Rwy 4¹**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 33

NA when local weather not available.

¹ILS, LOC, NA when control tower closed.

EMPORIA, VA

EMPORIA-
GREENSVILLE RGNL **RNAV (GPS) Rwy 15**
NA when local weather not available.

FARMVILLE, VA

FARMVILLE RGNL **NDB Rwy 3¹**
RNAV (GPS) Rwy 3
RNAV (GPS) Rwy 21

NA when local weather not available.

¹Categories A, B, 900-2; Category C, 900-2½.

FELKER AAF (KFAF)

FORT EUSTIS, VA..... **ORIG 08297**
NDB Rwy 14
COPTER NDB Rwy 14
RNAV (GPS) Rwy 14
COPTER RNAV (GPS) Rwy 14

NA when control tower closed.

FORT MEADE (ODENTON), MD

TIPTON **RNAV (GPS) Rwy 28**
NA when local weather not available.

FREDERICK, MD

FREDERICK MUNI **RNAV (GPS) Rwy 5^{1,2}**
RNAV (GPS) Y Rwy 23¹
RNAV (GPS) Z Rwy 23³

¹Category D, 800-2½.

²NA when local weather not available.

³Categories A,B,C,D, 800-2½.

GAITHERSBURG, MD

MONTGOMERY COUNTY
AIRPARK **NDB Rwy 14**
Categories A, B, 900-2; Category C, 900-2½;
Category D, 900-2½.

GALAX/HILLSVILLE, VA

TWIN COUNTY **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19

NA when local weather not available.

GEORGETOWN, DE

SUSSEX COUNTY **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 22

NA when local weather not available.

NAME ALTERNATE MINIMUMS

HAGERSTOWN, MD

HAGERSTOWN RGNL-RICHARD A.
HENSON FIELD **ILS or LOC Rwy 9¹**
ILS or LOC Rwy 27¹
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 27
VOR Rwy 9

NA when local weather not available.

¹NA when control tower closed.

HOT SPRINGS, VA

INGALLS FIELD **RNAV (GPS) Rwy 7¹**
RNAV (GPS) Rwy 25²

NA when local weather not available.

¹Categories A, B, 1000-2; Category C, 1000-2½, Category D, 1000-3.

²Category C, 800-2½; Category D, 800-2½.

JONESVILLE, VA

LEE COUNTY **RNAV (GPS) Rwy 25**
RNAV (GPS) Rwy 19

NA when local weather not available.

Categories A, B, 1000-2; Category C, 1000-2½; Category D, 1000-3.

LEESBURG, VA

LEESBURG EXECUTIVE **LOC Rwy 17¹**
RNAV (GPS) Rwy 17²

¹Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2½.

²NA when local weather not available.

LEONARDTOWN, MD

ST. MARY'S COUNTY
RGNL **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29

NA when local weather not available.

LOUISA, VA

LOUISA COUNTY/
FREEMAN FIELD **RNAV (GPS) Rwy 27**
NA when local weather not available.

LYNCHBURG, VA

LYNCHBURG RGNL/PRESTON GLENN
FIELD **ILS or LOC Rwy 4^{1,2}**
RNAV (GPS) Rwy 4³
RNAV (GPS) Rwy 22³
VOR/DME Rwy 22⁴
VOR Rwy 4³

¹ILS, LOC, NA when control tower closed.

²ILS, Categories A,B, 800-2; Category C, 900-2½, Category D, 900-2½. LOC, Category C, 900-2½, Category D, 900-2½.

³Category C, 900-2½; Category D, 900-2½.

⁴Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2½.

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ALTERNATE MINS

M3



NAME ALTERNATE MINIMUMS
MANASSAS, VA
 MANASSAS RGNL/HARRY P DAVIS
 FIELD **ILS or LOC Rwy 16L, 700-2**
 RNAV (GPS) Rwy 16L
 NA when control tower closed.

MARION/WYTHEVILLE, VA
 MOUNTAIN EMPIRE **RNAV (GPS) Rwy 26**
 NA when local weather not available.
 Category C, 800-2¼.

MARTINSVILLE, VA
 BLUE RIDGE **RNAV (GPS) Rwy 12**
 RNAV (GPS) Rwy 30¹
 NA when local weather not available.
 ¹Category D, 800-2¼.

MELFA, VA
 ACCOMACK COUNTY **RNAV (GPS) Rwy 3**
 RNAV (GPS) Rwy 21
 NA when local weather not available.

MIDDLETOWN, DE
 SUMMIT **RNAV (GPS) Rwy 17**
 RNAV (GPS) Rwy 35
 NA when local weather not available.

NEWPORT NEWS, VA
 NEWPORT NEWS/WILLIAMSBURG
 INTL **ILS or LOC Rwy 7¹²**
 ILS or LOC Rwy 25¹
 LOC/DME Rwy 20¹²
 RNAV (GPS) Rwy 7²
 RNAV (GPS) Rwy 20²
 ¹NA when control tower closed.
 ²NA when local weather not available.

OCEAN CITY, MD
 OCEAN CITY MUNI **RNAV (GPS) Rwy 2¹**
 RNAV (GPS) Rwy 32¹²
 VOR-A³
 ¹NA when local weather not available.
 ²Category D, 800-2¼.
 ³Categories A, B, 900-2; Category C, 900-2½;
 Category D, 900-2¼.

PETERSBURG, VA
 DINWIDDIE COUNTY **RNAV (GPS) Rwy 5**
 RNAV (GPS) Rwy 23
 VOR Rwy 23
 NA when local weather not available.

PHILLIPS AAF (KAPG)
 ABERDEEN PROVING
 GROUND, MD **NDB Rwy 22**
 VOR Rwy 22
 VOR/DME Rwy 22
 RNAV (GPS) Rwy 22
 NA when control tower closed.

ALTERNATE MINS

NAME ALTERNATE MINIMUMS
RICHLANDS, VA
 TAZEWEEL COUNTY **LOC/DME Rwy 25**
 RNAV (GPS) Rwy 25
 NA when local weather not available.

RICHMONT, VA
 RICHMOND INTL **ILS or LOC Rwy 16**
 ILS, Categories A,B, 900-2, Category C,
 900-2¼, Category D, 900-3.
 LOC, Categories A,B, 900-2, Category C,
 900-2¼, Category D, 900-3.

RICHMONT/ASHLAND, VA
 HANOVER
 COUNTY MUNI **RNAV (GPS) Rwy 16**
 VOR Rwy 16¹
 NA when local weather not available.
 ¹Category C, 800-2¼, Category D, 800-2¼.

ROANOKE, VA
 ROANOKE RGNL/WOODRUM
 FIELD **ILS or LOC Rwy 33¹²**
 LDA Rwy 6²
 VOR/NDB Rwy 33³

¹ILS, Categories A,B, 800-2; Category C,
 800-2¼; Category D, 800-2½. LOC,
 Category C, 800-2¼; Category D, 800-2½.
 ²Categories A,B, 1600-2; Categories C,D,
 1600-3.
 ³Categories A,B, 1400-2; Categories C,D,
 1400-3.

SALISBURY, MD
 SALISBURY-OCEAN CITY
 WICOMICO RGNL **ILS or LOC Rwy 32**
 RNAV (GPS) Rwy 32
 VOR Rwy 23¹
 NA when local weather not available.

¹Categories A, B, 1100-2; Categories C, D,
 1100-3.

SOUTH HILL, VA
 MECKLENBURG-
 BRUNSWICK RGNL **LOC Rwy 1**
 RNAV (GPS) Rwy 1
 RNAV (GPS) Rwy 19
 NA when local weather not available.

**STAUNTON-WAYNESBORO-
 HARRISONBURG, VA**
 SHENANDOAH VALLEY
 RGNL **ILS or LOC Rwy 5¹**
 NDB Rwy 5
 RNAV (GPS) Rwy 5
 RNAV (GPS) Rwy 23
 NA when local weather not available.
 ¹ILS, Category D, 700-2.

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ALTERNATE MINS

M4



NAME ALTERNATE MINIMUMS

SUFFOLK, VA

SUFFOLK EXECUTIVE RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 7

NA when local weather not available.

WALLOPS ISLAND, VA

WALLOPS FLIGHT

FACILITY VOR/DME or TACAN Rwy 10

Categories A,B, 900-2; Category C, 900-2½;
Category D, 900-2¾.

WASHINGTON, DC

WASHINGTON

DULLES INTL ILS or LOC/DME Rwy 1C¹
ILS or LOC/DME Rwy 1L¹
ILS or LOC/DME Rwy 12¹
ILS or LOC/DME Rwy 19C¹
ILS or LOC/DME Rwy 19R¹
ILS or LOC Rwy 1R¹
ILS or LOC Rwy 19L¹
RNAV (GPS) Y Rwy 19R²

¹ILS, Categories A, B, C, D, 700-2.

²Category D, 800-2¾.

RONALD REAGAN

WASHINGTON NATIONAL ILS Rwy 1¹
LDA/DME Rwy 19²
RNAV (GPS) Rwy 33³
ROSSLYN LDA Rwy 19, 1100-3
VOR/DME or GPS Rwy 15⁴
VOR/DME or GPS Rwy 19⁵
VOR Rwy 1²

¹ILS, Categories A, B,C, 700-2; Category D,
700-2¾. LOC, Category D, 800-2¾.

²Category D, 800-2¾.

³Categories A,B,C,D, 800-2½.

⁴Categories A,B, 1000-2; Category C, 1000-2¾;
Category D, 1000-3.

⁵Categories A,B, 1000-2; Categories C,D,
1000-3.

NAME ALTERNATE MINIMUMS

WEST POINT, VA

MIDDLE

PENINSULA RGNL RNAV (GPS) Rwy 10
VOR-A

NA when local weather not available.

WESTMINSTER, MD

CARROLL COUNTY RGNL/

JACK B POAGE FIELD ... RNAV (GPS) Rwy 34
NA when local weather not available.

WILMINGTON, DE

NEW CASTLE ILS or LOC Rwy 11²
RNAV (GPS) Rwy 1²
RNAV (GPS) Rwy 9²
RNAV (GPS) Rwy 19²
RNAV (GPS) Rwy 27²
VOR Rwy 1²³
VOR Rwy 27³

¹NA when control tower closed.

²NA when local weather not available.

³Category D, 800-2¾.

WINCHESTER, VA

WINCHESTER RGNL RNAV (GPS) Rwy 14
RNAV (GPS) Rwy 32
VOR/DME-A

NA when local weather not available.

WISE, VA

LONESOME PINE LOC/DME Rwy 24¹²
RNAV (GPS) Rwy 6¹²
RNAV (GPS) Rwy 24³

¹NA when local weather not available.

²Category D, 800-2¾.

³Category C, 800-2¾; Category D, 900-2¾.

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INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude, and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

ABINGDON, VA

VIRGINIA HIGHLANDS (VJI)

AMDT 2 10266 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6**, 300-2 or 300-1½ w/ min. climb of 225' per NM to 2500, or std. w/ min. climb of 749' per NM to 2500.

DEPARTURE PROCEDURE: **Rwy 6**, climb heading 061° and HNV VORTAC R-034 to 5500 before proceeding on course. **Rwy 24**, climb heading 241° to 3700 before proceeding on course.

NOTE: **Rwy 6**, vehicle 89' from DER, 411' left of centerline, 15' AGL/2094' MSL. Obstruction light 504' from DER, 314' left of centerline, 22' AGL/2122' MSL. Trees beginning 214' from DER, 245' right of centerline, up to 100' AGL/2240' MSL. Trees beginning 579' from DER, 35' left of centerline, up to 100' AGL/2379' MSL. **Rwy 24**, hangar vent 13' from DER, 496' left of centerline, 55' AGL/2086' MSL. Buildings 828' from DER, 628' left of centerline, up to 25' AGL/2084' MSL. Trees beginning 2222' from DER, 262' right of centerline, up to 100' AGL/2200' MSL. Tree 3592' from DER, 14' left of centerline, 100' AGL/2167' MSL.

NAME TAKE-OFF MINIMUMS

ANDREWS AFB/NAF (KADW)

CAMP SPRINGS, MD. 09127

TAKE-OFF OBSTACLES: **Rwy 1L**, trees 2972' to 3085' from DER, 765' to 906' right of centerline, 93' AGL/355' MSL. **Rwy 1R**, trees 1512' from DER, 856' right of centerline, 74' AGL/336' MSL; trees 2254' from DER, 645' left of centerline, 93' AGL/355' MSL; trees 2629' from DER, 1095' left of centerline, 93' AGL/355' MSL; trees 2882' from DER, 364' left of centerline, 104' AGL/362' MSL. **Rwy 19L**, terrain 267' from DER, 580' left of centerline, 261' MSL; trees 2650' to 2874' from DER, 946' to 1113' right of centerline, 91' AGL/334' MSL. **Rwy 19R**, trees 2650' to 2873' from DER, 887' to 1054' left of centerline, 91' AGL/334' MSL; tower 4630' from DER, 1664' right of centerline, 108' AGL/377' MSL.

ANNAPOLIS, MD

LEE

TAKE-OFF MINIMUMS: **Rwy 30**, 300-1 or std. with a min. climb of 410' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 12**, climb runway heading to 700 before proceeding on course.

Rwy 30, climb runway heading to 1000 before proceeding right on course. Climb runway heading to 700 before proceeding left on course.

NOTE: **Rwy 12**, cross departure end of runway at or above 35' AGL/66' MSL. **Rwy 30**, trees, 1433' from departure end of runway, 85' left of centerline, 100' AGL/139' MSL. Cross departure end of runway at or above 35' AGL/66' MSL.

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BALTIMORE, MD

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

AMDT 9 10266 (FAA)

TAKE-OFF MINIMUMS: **Rwy 4**, 300-1½ or std. w/ min. climb of 210' per NM to 500, or alternatively, with standard takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 1300' prior to DER. **Rwy 33R**, std. w/ min. climb of 251' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 044° to 800 before turning left. **Rwy 28**, climb heading 285° to 900 before turning right. **Rwy 33L**, climb heading 320° to 2000 before turning right.

NOTE: **Rwy 4**, rod on lighted pole 1921' from DER, 329' right of centerline, 58' AGL/197' MSL. Light on pole 2177' from DER, 294' left of centerline, 58' AGL/197' MSL. Light on pole 1755' from DER, 482' right of centerline, 47' AGL/186' MSL. Tree 2370' from DER, 481' right of centerline, 60' AGL/199' MSL. Tank 1.2 NM from DER, 2274' left of centerline, 173' AGL/338' MSL.

Rwy 10, building 52' from DER, 319' left of centerline, 13' AGL/133' MSL. **Rwy 15L**, trees beginning 648' from DER, 619' left of centerline, up to 68' AGL/167' MSL. Light on pole 921' from DER, 618' left of centerline, 62' AGL/161' MSL. **Rwy 15R**, trees beginning 1144' from DER, 740' right of centerline, up to 53' AGL/172' MSL.

Rwy 22, light poles beginning 213' from DER, 365' left of centerline, up to 30' AGL/189' MSL. **Rwy 28**, tree 1392' from DER, 736' left of centerline, 77' AGL/176' MSL. **Rwy 33L**, fence 203' from DER, 517' right of centerline, 9' AGL/149' MSL. Tree 2250' from DER, 843' right of centerline, 66' AGL/205' MSL. Microwave antenna on building, 4725' from DER, 907' right of centerline, 126' AGL/265' MSL. Building 4693' from DER, 874' right of centerline, 127' AGL/266' MSL.

Building-tower 4734' from DER, 907' right of centerline, 126' AGL/265' MSL. Building 4693' from DER, 874' right of centerline, 127' AGL/266' MSL. Building-tower 4734' from DER, 922' right of centerline, 140' AGL/260' MSL. **Rwy 33R**, trees beginning 2925' from DER, 321' left of centerline, up to 70' AGL/289' MSL. Trees beginning 975' from DER, 116' right of centerline, up to 83' AGL/262' MSL. Light on pole 2384' from DER, 837' right of centerline, 55' AGL/254' MSL. Light on pole 2736' from DER, 247' right of centerline, 17' AGL/216' MSL. Pole 3781' from DER, 370' right of centerline, 40' AGL/242' MSL. Building 998' from DER, 654' left of centerline, 24' AGL/183' MSL. Signal 2453' from DER, 904' left of centerline, 45' AGL/204' MSL. Light on pole 3869' from DER, 603' left of centerline, 72' AGL/251' MSL.

Building-tower 4734' from DER, 907' right of centerline, 126' AGL/265' MSL. Building 4693' from DER, 874' right of centerline, 127' AGL/266' MSL. Building-tower 4734' from DER, 922' right of centerline, 140' AGL/260' MSL. **Rwy 33R**, trees beginning 2925' from DER, 321' left of centerline, up to 70' AGL/289' MSL. Trees beginning 975' from DER, 116' right of centerline, up to 83' AGL/262' MSL. Light on pole 2384' from DER, 837' right of centerline, 55' AGL/254' MSL. Light on pole 2736' from DER, 247' right of centerline, 17' AGL/216' MSL. Pole 3781' from DER, 370' right of centerline, 40' AGL/242' MSL. Building 998' from DER, 654' left of centerline, 24' AGL/183' MSL. Signal 2453' from DER, 904' left of centerline, 45' AGL/204' MSL. Light on pole 3869' from DER, 603' left of centerline, 72' AGL/251' MSL.

BALTIMORE, MD (CON'T)

MARTIN STATE

TAKE-OFF MINIMUMS: **Rwy 15**, 800-2 or std. with a min. climb of 300' per NM to 1000. **Rwy 33**, 1300-2 or std. with a min. climb of 340' per NM to 1700'.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1000 before proceeding on course; or when directed by ATC, climbing right turn heading 190° to 1000 before proceeding on course.

NOTE: **Rwy 15**, trees 1960' from departure end of runway 684' left of centerline, 78' AGL/88' MSL, trees 3395' from departure end of runway, 585' left of centerline, 92' AGL/102' MSL. **Rwy 33**, pole 1553' from departure end of runway, across centerline, 68' AGL/90' MSL. Trees 2342' from departure end of runway, across centerline 86' AGL/108' MSL.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

AMDT 4 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, 400-1½ or std. w/ min. climb of 563' per NM to 2700.

DEPARTURE PROCEDURE: **Rwy 12**, climbing right turn direct PSK VORTAC to 3500 before proceeding on course. **Rwy 30**, climbing left turn direct PSK VORTAC to 4100 before proceeding on course.

NOTE: **Rwy 12**, bushes and trees beginning 275' from departure end of runway, 154' left of centerline, up to 100' AGL/2239' MSL. Trees beginning 5108' from departure end of runway, 1363' left of centerline, up to 100' AGL/2499' MSL. Trees beginning 3165' from departure end of runway, 1324' right of centerline up to 100' AGL/2279' MSL. **Rwy 30**, trees beginning 90' from departure end of runway, 461' left of centerline, up to 46' AGL/2140' MSL. Fence and obstruction light pole beginning 546' from departure end of runway, 161' left of centerline, up to 12' AGL/2139' MSL. Vehicle on road beginning 567' from departure end of runway, 310' left of centerline, 24' AGL/2137' MSL. Trees beginning 2080' from departure end of runway, 788' left of centerline, up to 100' AGL/2201' MSL. Fence, 861' from departure end of runway, 52' right of centerline, up to 12' AGL/2135' MSL. Trees beginning 539' from departure end of runway, 326' right of centerline, up to 40' AGL/2153' MSL. Trees beginning 1328' from departure end of runway, 117' right of centerline, up to 100' AGL/2182' MSL. Terrain beginning 330' from departure end of runway, 366' right of centerline, up to 2138' MSL. pole and antenna beginning 1149' from departure end of runway, 391' right of centerline, up to 40' AGL/2151' MSL.

BLACKSTONE, VA

ALLEN C PERKINSON BLACKSTONE AAF

TAKE-OFF MINIMUMS: **Rwy 1**, 1000-2 or std. with a min. climb of 280' per NM to 1700. **Rwy 4**, 1000-2 or std. with a min. climb of 220' per NM to 1700. **Rwy 19**, NA.

DEPARTURE PROCEDURE: **Rwy 1**, climb heading 010° to 1700 before proceeding on course. **Rwy 4**, climb heading 039° to 1700 before proceeding on course.

Rwy 22, climb heading 208° to 900 before proceeding on course.

NOTE: **Rwy 4**, 50' AGL tree, 150' from departure end of runway, 450' right of centerline. **Rwy 22**, 66' AGL tree, 175' from departure end of runway, 450' left of centerline. Do not fly over ammunition dump 1.1 NM SW of Rwy 4.

BRIDGEWATER, VA

BRIDGEWATER AIRPARK (VBW)

AMDT 2 10126 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 300-2½ w/ min. climb of 280'/NM to 3900, or std. w/ min. climb of 440'/NM to 2600, or 2400-3 for climb in visual conditions. **Rwy 33**, 800-2½ w/ min. climb of 390'/NM to 5000, or std. w/ min. climb of 522'/NM to 2200, or 2400-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 152° to 3900, or for climb in visual conditions, cross Bridgewater Air Park at or above 3400 before proceeding on course. **Rwy 33**, climb heading 347° to 5000, or for climb in visual conditions, cross Bridgewater Air Park at or above 3400 before proceeding on course.

NOTE: **Rwy 15**, vehicles on roadway 53' from DER, 14' right of centerline, 15' AGL/1180' MSL. Trees beginning 158' from DER, 259' right of centerline, up to 100' AGL/1279' MSL. Trees beginning 499' from DER, 628' left of centerline, up to 100' AGL/1279' MSL. Pole 908' from DER, 183' left of centerline, 35' AGL/1200' MSL. Trees beginning 3205' from DER, 1329' right of centerline, up to 100' AGL/1359' MSL. **Rwy 33**, trees beginning 318' from DER, 252' right of centerline, up to 100' AGL/1249' MSL. Trees beginning 470' from DER, 191' left of centerline, up to 100' AGL/1249' MSL.

BROOKNEAL, VA

BROOKNEAL/CAMPBELL COUNTY

NOTE: **Rwy 6**, multiple trees beginning 569' from departure end of runway, 252' right of centerline, up to 100' AGL/689' MSL. **Rwy 24**, multiple trees beginning 334' from departure end of runway, 286' right of centerline, up to 100' AGL/679' MSL. Multiple trees beginning 1377' from departure end of runway, 850' left of centerline, up to 100' AGL/719' MSL.

CAMBRIDGE, MD

CAMBRIDGE-DORCHESTER

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1.

CAMP PEARY LNDG STRIP (KW94)

WILLIAMSBURG, VA 08213

TAKE-OFF OBSTACLES: **Rwy 5**: trees and multiple transmission lines 120' from DER, 184' left of centerline up to 95' AGL/126' MSL. Trees and multiple transmission lines 162' from DER, 257' right of centerline up to 100' AGL/132' MSL. **Rwy 23**: trees and multiple transmission lines 1891' from DER, 69' left of centerline up to 95' AGL/136' MSL. Multiple trees and transmission lines 537' from DER, 437' right of centerline up to 110' AGL/151' MSL.

CHARLOTTESVILLE, VA

CHARLOTTESVILLE-ALBEMARLE (CHO)

AMDT 9 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3**, std. w/ min. climb of 323' per NM to 1500, or 2200-3 for climb in visual conditions. DEPARTURE PROCEDURE: **Rwy 3**, climb via heading 030° to 1500 then climbing right turn to 4000 direct GVE VORTAC before proceeding on course, or for climb in visual conditions: cross Charlottesville-Albemarle airport at or above 2700 before proceeding on course.

Rwy 21, climb via heading 210° to 1400, then climbing left turn to 4000 direct GVE VORTAC before proceeding on course.

NOTE: **Rwy 3**, pole 97' from DER, 476' right of centerline, 27' AGL/627' MSL. Trees beginning 836' from DER, 597' right of centerline, up to 100' AGL/1216' MSL. Tower 2.3 NM from DER, 3443' right of centerline, 107' AGL/1167' MSL. Terrain beginning 2.2 NM from DER, 3183' right of centerline, up to 1116' MSL.

CHASE CITY, VA

CHASE CITY MUNI

NOTE: **Rwy 18**, trees beginning 191' from departure end of runway, 116' left of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 327' from departure end of runway, 133' right of centerline, up to 100' AGL/599' MSL. **Rwy 36**, trees beginning 164' from departure end of runway, 154' right of centerline, up to 100' AGL/649' MSL. Trees beginning 470' from departure end of runway, 124' left of centerline, up to 100' AGL/649' MSL.

CHURCHVILLE, MD

HARFORD COUNTY

TAKE-OFF MINIMUMS: **Rwy 28**, 300-1 or std. with a min. climb of 400' per NM to 600.

NOTE: **Rwy 28**, 100' terrain/trees 1150' from departure end of runway.

CLARKSVILLE, VA

LAKE COUNTRY RGNL (W63)

AMDT 1 10098 (FAA)

NOTE: **Rwy 4**, trees beginning 5' from DER, 438' left of centerline, up to 100' AGL/539' MSL. Building 27' from DER, 94' right of centerline, 20' AGL/449' MSL. Vehicles on road beginning 200' from DER, from left to right of centerline, up to 15' AGL/444' MSL. Warehouse 313' from DER, on centerline, 75' AGL/495' MSL. Building 385' from DER, 257' right of centerline, 20' AGL/439' MSL. Trees beginning 444' from DER, 518' right of centerline, up to 100' AGL/509' MSL. **Rwy 22**, trees beginning 3' from DER from 452' left of centerline to 547' right of centerline, up to 100' AGL/422' MSL. Trees beginning 1624' from DER, from 632' left of centerline to 535' right of centerline, up to 100' AGL/485' MSL.

CLINTON, MD

WASHINGTON EXECUTIVE/HYDE FIELD (W32)

ORIG - A 10126 (FAA)

NOTE: **Rwy 5**, Vehicle on road beginning 20' from DER, on centerline, up to 15' AGL/261' MSL. Antenna on tower beginning 2333' from DER, 556' right of centerline, 137' AGL/361' MSL. **Rwy 23**, Vehicle on road 23' from departure end of runway, 329' left of centerline, 15' AGL/260' MSL.

COLLEGE PARK, MD

COLLEGE PARK (CGS)

AMDT 3B 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15**, 400-2¼ or std. w/ min. climb of 486' per NM to 600. **Rwy 33**, 400-2½ or std. w/ min. climb of 433' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 149° to 600 before proceeding on course. **Rwy 33**, climb heading 329° to 600 before proceeding on course.

NOTE: **Rwy 15**, trees beginning 2799' from departure end of runway, 570' left of centerline, up to 100' AGL/259' MSL. Antenna 1.1 NM from departure end of runway, 149' left of centerline, 167' AGL/270' MSL. **Rwy 33**, terrain beginning 1 NM from departure end of runway, 3700' right of centerline to 3700' left of centerline, up to 439' MSL. Building 3811' from departure end of runway, 467' right of centerline, 184' AGL/254' MSL. Tower 1.9 NM from departure end of runway, 1447' left of centerline, 255' AGL/405' MSL.

CRISFIELD, MD

CRISFIELD MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24**, NA-obstacles

DEPARTURE PROCEDURE: **Rwy 14**, climb via heading 142° to 900 before proceeding on course.

Rwy 32, climb via heading 322° to 900 before proceeding on course.

CULPEPER, VA

CULPEPER RGNL (CJR)

ORIG 07354 (FAA)

DEPARTURE PROCEDURE: **Rwy 22**, climb heading 128° to 1000 before turning right.

NOTE: **Rwy 4**, tree 79' from departure end of runway, 418' left of centerline 86' AGL/337' MSL. Vehicle on road 207' from departure end of runway, 367' left of centerline, 15' AGL/330' MSL. Tree 3396' from departure end of runway, 514' right of centerline, 91' AGL/410' MSL. **Rwy 22**, tree 128' from departure end of runway, 332' left of centerline, 25' AGL/334' MSL. Multiple trees beginning 272' from departure end of runway, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from departure end of runway, 68' left of centerline, 27' AGL/356' MSL.

CUMBERLAND, MD

GREATER CUMBERLAND RGNL

TAKE-OFF MINIMUMS: **Rwy 5**, 1700-2 or std. with a min. climb of 300' per NM to 3400. **Rwy 11**, 1600-2 or std. with a min. climb of 520' per NM to 3400. **Rwy 23**, 1200-2 or std. with a min. climb of 660' per NM to 3400. **Rwy 29**, NA.

DEPARTURE PROCEDURE: **Rwys 5, 11**, climb runway heading to 3400 before proceeding on course. **Rwy 23**, climbing left turn to intercept 177° course from CBE NDB to 3400 before proceeding on course.

DANVILLE, VA

DANVILLE RGNL (DAN)

AMDT 1 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13**, 300-1¼ or std. with a min. climb of 299' per NM to 900.

NOTE: **Rwy 2**, tree 1092' from DER, 8' left of centerline, 67' AGL/586' MSL. Tree 1524' from DER, 659' right of centerline, 67' AGL/606' MSL. **Rwy 13**, trees beginning 569' from DER, 300' right of centerline, up to 100' AGL/759' MSL. Trees beginning 680' from DER, 308' left of centerline, up to 65' AGL/604' MSL. **Rwy 20**, tree 1328' from DER, 633' right of centerline, 30' AGL/569' MSL. **Rwy 31**, hanger 395' from DER, 573' left of centerline, 23' AGL/602' MSL. Pole 1002' from DER, 375' left of centerline, 29' AGL/608' MSL. Antenna 1165' from DER, 416' left of centerline, 62' AGL/641' MSL. Trees beginning 1206' from DER, 287' left of centerline, up to 80' AGL/699' MSL. Trees beginning 2180' from DER, 632' right of centerline, up to 62' AGL/681' MSL.

DAVISON AAF (KDAV)

FORT BELVOIR, VA

..... Rwy 32, 300-1*

*Or standard with minimum climb of 380/NM to 500.

TAKE-OFF OBSTACLES: Rwy 32, 63' AGL tree 865' from departure end of rwy, 82' right of centerline.

DOVER AFB (KDOV)

DOVER, DE 09155

TAKE-OFF OBSTACLES: **Rwy 1**, possible aircraft/vehicles at DER hammerhead just left of rwy centerline, up to 65' AGL/91' MSL. **Rwy 19**, possible aircraft/vehicles at DER hammerhead just right of rwy centerline, up to 65' AGL/91' MSL. **Rwy 32**, multiple C-5s parked on ramp beginning 1535' thru 2780' from DER, 1010' left of centerline, up to 65' AGL/98' MSL. Bldg 3900' from DER, 760' left of centerline, 88' AGL/119' MSL. Possible taxiing aircraft/vehicles on taxilane Alpha beginning 565' thru 2780' from DER, 750' left of centerline, up to 65' AGL/98' MSL. Possible large aircraft 2800' from DER, on taxiway Golf just left of centerline, up to 65' AGL/92' MSL.

DOVER/CHESWOLD, DE

DELAWARE AIRPARK

NOTE: **Rwy 9**, multiple trees beginning 26' from departure end of runway, 50' left of centerline, up to 100' AGL/149' MSL. Pole line 1151' from departure end of runway, 36' right of centerline, 50' AGL/99' MSL. Multiple trees beginning 815' from departure end of runway, 505' right of centerline, up to 100' AGL/154' MSL. **Rwy 27**, multiple trees beginning 231' from departure end of runway, 85' left of centerline, up to 100' AGL/169' MSL. Multiple trees beginning 829' from departure end of runway, 43' right of centerline, up to 100' AGL/164' MSL.



DUBLIN, VA

NEW RIVER VALLEY (PSK)

AMDT 2 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24**, 200-1½ or std. w/ min. climb of 310' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 6**, climbing right turn heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course.

Rwy 24, climb heading 238° to 4000 before proceeding on course.

NOTE: **Rwy 6**, tree 321' from DER, 493' left of centerline, 100' AGL/2112' MSL. Terrain 122' from DER, 460' left of centerline, up to 2105' MSL. **Rwy 24**, pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL. Pole 669' from DER, 558' right of centerline, 18' AGL/2137' MSL. Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231' MSL. Tower 5078' from DER 1017' left of centerline, 101' AGL/2300' MSL. Trees 226' from DER, 271' left of centerline, up to 103' AGL/2302' MSL. Terrain 68' from DER, 281' right of centerline, up to 2116' MSL.

EASTON, MD

EASTON/NEWMAM FIELD

TAKE-OFF MINIMUMS: **Rwy 22**, 300-2 or std. w/ climb of 241' per NM to 500.

NOTE: **Rwy 4**, vehicles on roads beginning 199' from departure end of runway, 350' right of centerline, up to 15' AGL/102' MSL. Multiple poles beginning 434' from departure end of runway, 88' right of centerline, up to 31' AGL/100' MSL. Multiple trees beginning 1485' from departure end of runway, 46' right of centerline, up to 64' AGL/133' MSL. Tree 1509' from departure end of runway, 38' left of centerline, 47' AGL/116' MSL.

Rwy 15, fence 2' from departure end of runway, 411' left of centerline, 8' AGL/57' MSL. Multiple poles beginning 721' from departure end of runway, 183' left of centerline, up to 64' AGL/123' MSL. Multiple poles beginning 828' from departure end of runway, 514' right of centerline, up to 26' AGL/85' MSL. Multiple trees beginning 862' from departure end of runway, 275' left of centerline, up to 89' AGL/148' MSL. Multiple trees beginning 1357' from departure end of runway, 238' right of centerline, up to 94' AGL/153' MSL. **Rwy 22**, tree 1251' from departure end of runway, 786' right of centerline, 56' AGL/95' MSL. Multiple trees beginning 1323' from departure end of runway, 759' left of centerline, up to 90' AGL/129' MSL. Tower 1.6 NM from departure end of runway, 2373' left of centerline, 276' AGL/291' MSL. **Rwy 33**, multiple trees 10' from departure end of runway, 19' right of centerline, up to 139' AGL/158' MSL. Vehicle on road 352' from departure end of runway, 405' right of centerline, 15' AGL/59' MSL. Pole 888' from departure end of runway, 409' left of centerline, 19' AGL/58' MSL. Multiple trees beginning 1153' from departure end of runway, 245' left of centerline, up to 99' AGL/118' MSL.

ELKTON, MD

CECIL COUNTY

TAKE-OFF MINIMUMS: NOTE: **Rwy 13**, cross departure end of runway at or above 27' AGL/89' MSL. **Rwy 31**, 300-1½ or std. w/ min. climb of 290' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 31**, climb heading 308° to 900 before turning left.

NOTE: **Rwy 13**, trees 185' from departure end of runway, 110' right of centerline, 50' AGL/113' MSL. Trees 325' from departure end of runway, 125' left of centerline, 75' AGL/138' MSL. **Rwy 31**, trees, 1350' from departure end of runway, on centerline, 115' AGL/221' MSL. Trees beginning 1050' from departure end of runway, 781' left to 781' right of centerline, up to 100' AGL/309' MSL.

EMPORIA, VA

EMPORIA-GREENSVILLE RGNL (EMV)

ORIG 09155 (FAA)

NOTE: **Rwy 15**, vehicle on roadway 21' from DER, 291' left of centerline, up to 15' AGL/124' MSL. Trees beginning 56' from DER, 245' right of centerline, up to 60' AGL/169' MSL. Trees beginning 98' from DER, 231' left of centerline, up to 60' AGL/169' MSL. Trees beginning 1387' from DER, 387' left of centerline, up to 60' AGL/149' MSL. **Rwy 33**, trees beginning 115' from DER, 276' right of centerline, up to 60' AGL/189' MSL. Trees beginning 138' from DER, 321' left of centerline, up to 60' AGL/189' MSL. Vehicle on roadway, 163' from DER, 524' right of centerline, up to 15' AGL/144' MSL. Vehicle on roadway, 222' from DER, 534' left of centerline, up to 17' AGL/146' MSL.

FARMVILLE, VA

FARMVILLE RGNL (FVX)

AMDT 1 10154 (FAA)

NOTE: **Rwy 3**, trees beginning 64' from DER, 156' left of centerline, up to 77' AGL/506' MSL. Trees beginning 149' from DER, 398' right of centerline, up to 93' AGL/502' MSL. **Rwy 21**, vehicle on road 97' from DER, 475' left of centerline, up to 15' AGL/422' MSL. Trees beginning 56' from DER, 21' right of centerline, up to 80' AGL/489' MSL. Trees beginning 553' from DER, 53' left of centerline, up to 55' AGL/491' MSL.

FELKER AAF (KFAF),

FORT EUSTIS, VA 08297

Rwy 14, 32 standard.

TAKE-OFF OBSTACLES: **Rwy 14**: Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL. **Rwy 32**: Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL. Trees beginning 2931' from DER, 186' left of centerline up to 74' AGL/85' MSL.

FORT MEADE (ODENTON), MD

TIPTON

NOTE: **Rwy 10**, cross departure end of runway at or above 17' AGL/167' MSL. **Rwy 10**, trees 1052' right of departure end of runway, 88' AGL/238' MSL.

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10266

L6

FRANKLIN, VA

FRANKLIN MUNI-JOHN BEVERLY ROSE
(FKN)

AMDT 2 09071 (FAA)

NOTE: **Rwy 9**, trees beginning 1977' from DER, 349' left of centerline, up to 100' AGL/139' MSL. Trees beginning 1287' from DER, 236' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 533' from DER, 604' right of centerline, 15' AGL/59' MSL. **Rwy 27**, trees beginning 100' from DER, 444' left of centerline, up to 100' AGL/134' MSL. Trees beginning 520' from DER, 520' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 308' from DER, left to right of centerline, 15' AGL/44' MSL.

FREDERICK, MD

FREDERICK MUNI

TAKE-OFF MINIMUMS: **Rwy 12**, 500-3 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 2000 before proceeding on course. **Rwy 30**, climbing right turn to intercept FDK VOR R-010 to 2400 before proceeding on course.

FREDERICKSBURG, VA

SHANNON

TAKE-OFF MINIMUMS: **Rwy 24**, 800-3 or std. with a min. climb of 290' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 24**, climb to 800 via runway heading before proceeding on course.

NOTE: 744' tower 2.1 NM from departure end of Rwy 24.

FRIENDLY, MD

POTOMAC AIRFIELD

TAKE-OFF MINIMUMS: **Rwys 6, 24**, 300-1.

NOTE: **Rwy 6**, 50' AGL trees 300' left of departure end of runway. 75' AGL trees 320' right of departure end of runway. **Rwy 24**, 80' AGL trees 200' right of departure end of runway. 75' AGL trees 200' left of departure end of runway. 30' AGL hanger 200' from departure end of runway, 190' right of centerline.

FRONT ROYAL, VA

FRONT ROYAL-WARREN COUNTY (FRR)

AMDT 1 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/ min. climb of 415' per NM to 1100. **Rwy 28**, NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 10**, climbing left turn direct MRB VORTAC before proceeding on course.

NOTE: **Rwy 10**, vehicles on roadway beginning 221' from DER, left and right of centerline, up to 17' AGL/736' MSL. Powerlines beginning 835' from DER, left and right of centerline, up to 79' AGL/828' MSL. Trees beginning 1060' from DER, 51' left of centerline, up to 100' AGL/779' MSL. Trees beginning 1660' from DER, 550' right of centerline, up to 100' AGL/939' MSL.

GAITHERSBURG, MD

MONTGOMERY COUNTY AIRPARK

TAKE-OFF MINIMUMS: NOTE: **Rwy 14**, 62' AGL trees 197' right of centerline. **Rwy 32**, 63' AGL trees 335' left of centerline.

GALAX-HILLSVILLE, VA

TWIN COUNTY

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1 or std. with a min. climb of 240' per NM until passing 3000. **Rwy 1**, 300-1 or std. with a min. climb of 310' per NM until passing 3000.

GEORGETOWN, DE

SUSSEX COUNTY

TAKE-OFF MINIMUMS: **Rwys 4, 13, 22, 31**, 300-1.

GRUNDY, VA

GRUNDY MUNI

TAKE-OFF MINIMUMS: **Rwy 22**, 300-2 or std. with a min. climb of 240' per NM to 2700.

HAGERSTOWN, MD

HAGERSTOWN RGNL -RICHARD A. HENSON
FIELD

TAKE-OFF MINIMUMS: **Rwy 2**, 300-1.

DEPARTURE PROCEDURE: **Rwy 9**, climbing left turn to 2500 via 040° heading to intercept the HGR R-084 before departing as cleared. **Rwys 2, 20**, climb to 2000 before turning eastbound.

HOT SPRINGS, VA

INGALLS FIELD

TAKE-OFF MINIMUMS: **Rwy 7**, 500-1 or std. with a min. climb of 320' per NM to 4400. **Rwy 25**, 600-1 or std. with a min. climb of 390' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 7**, climb runway heading to 4400 before proceeding on course.

Rwy 25, climb runway heading to 5000 before proceeding on course.

INDIAN HEAD, MD

MARYLAND

TAKE-OFF MINIMUMS: **Rwy 36**, 300-1½ or std. w/ min. climb of 360' per NM to 600.

NOTE: **Rwy 18**, trees abeam departure end of runway, 125' left of centerline, up to 100' AGL/256' MSL. Trees 269' from departure end of runway, on centerline, 100' AGL/256' MSL. Trees abeam departure end of runway, 125' right of centerline, up to 100' AGL/256' MSL. Tower 6170' from departure end of runway, 620' right of centerline, 190' AGL/384' MSL. **Rwy 36**, trees 258' from departure end of runway, 309' left of centerline, up to 100' AGL/271' MSL. Tree 567' from departure end of runway, 125' left of centerline, 60' AGL/230' MSL. Rising terrain beginning 73' from departure end of runway, 64' right of centerline, 180' MSL.

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JONESVILLE, VA

LEE COUNTY

TAKE-OFF MINIMUMS: **Rwy 7**, std. w/min. climb of 467' per NM to 3800, or 1900-3 for climb in visual conditions. **Rwy 25**, std. w/min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 7, 25**, for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.

NOTE: **Rwy 7**, terrain 116' from departure end of runway, 72' right of centerline, 1439' MSL. Terrain 691' from departure end of runway, 53' right of centerline, 1459' MSL. Terrain 267' from departure end of runway, 190' left of centerline, 1439' MSL. Terrain 479' from departure end of runway, 68' left of centerline, 1459' MSL.

LANGLEY AFB (KLF)

HAMPTON, VA

..... Orig 07354
..... **Rwy 8**, 500-3*

* Or standard with minimum climb of 240 ft/NM to 700.

NOTE: **Rwy 26**, cross DER at or above 10' AGL/18' MSL.

TAKE-OFF OBSTACLES: **Rwy 8**, Boat 2261' from DER, 779' left of centerline, 60' AGL/80' MSL. Boat 2500' from DER, 59' left of centerline, 60' AGL/70' MSL. Vehicle on road 1051' from DER, 702' right of centerline, 15' AGL/43' MSL. Boat 2841' from DER, 641' right of centerline, 60' AGL/80' MSL. Multiple towers 2.0 NM from DER, 1.7 NM right of centerline, 503' AGL/511' MSL. **Rwy 26**, Tree 4050' from DER, 685' left of centerline, 100' AGL/120' MSL. Tree 4840' from DER, 687' left of centerline, 100' AGL/136' MSL. Tree 4044' from DER, 31' left of centerline, 101' AGL/113' MSL. Tree 4153' from DER, 342' right of centerline, 101' AGL/114' MSL. Tree 4037' from DER, 623' right of centerline, 101' AGL/110' MSL. Tree 4377' from DER, 435' right of centerline, 100' AGL/121' MSL. Tree 3805' from DER, 1184' right of centerline, 100' AGL/133' MSL.

LAUREL, DE

LAUREL

DEPARTURE PROCEDURE: **Rwys 15, 33**, climb runway heading to 1200 before proceeding on course.

LAWRENCEVILLE, VA

LAWRENCEVILLE/BRUNSWICK MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24**, NA.

NOTE: **Rwy 18**, trees 1654' from departure end of runway, 772' left of centerline, 88' AGL/407' MSL. Trees 200' from departure end of runway, on centerline, 22' AGL/321' MSL. **Rwy 36**, trees 1487' from departure end of runway, 20' left of centerline, 88' AGL/420' MSL. Trees 113' from departure end of runway, 372' right of centerline, 88' AGL/420' MSL.

LEESBURG, VA

LEESBURG EXECUTIVE (JYO)

AMDT 2 10266 (FAA)

DEPARTURE PROCEDURE: **Rwy 35**, climb heading 351° to 1200 before proceeding on course.

NOTE: **Rwy 17**, vehicle on roadway, 320' from DER, 565' left of centerline, up to 15' AGL/414' MSL. Building 167' from DER, 360' left of centerline, 22' AGL/401' MSL. Pole 958' from DER, 373' left of centerline, 32' AGL/421' MSL. Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL. **Rwy 35**, terrain 96' from DER, 453' left of centerline, 381' MSL. Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL. Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.

LEONARDTOWN, MD

ST. MARY'S COUNTY RGNL

NOTES: **Rwy 11**, multiple trees beginning 88' from departure end of runway, 339' left of centerline, up to 80' AGL/205' MSL. Multiple trees beginning 61' from departure end of runway, 193' right of centerline up to 80' AGL/205' MSL. **Rwy 29**, multiple trees beginning 996' from departure end of runway, 227' left of centerline up to 79' AGL/221' MSL. Multiple trees beginning 596' from departure end of runway, 277' right of centerline up to 71' AGL/213' MSL. Multiple towers on buildings beginning 53' from departure end of runway, 400' right of centerline up to 26' AGL/168' MSL. Equipment on building 223' from departure end of runway, 449' right of centerline, 15' AGL/169' MSL. Tower 402' from departure end of runway, 399' right of centerline, 33' AGL/175' MSL. Fence 496' from departure end of runway, 241' right of centerline, 22' AGL/164' MSL.

LOUISA, VA

LOUISA COUNTY/FREEMAN FIELD (LKU)

AMDT 1 10210 (FAA)

NOTE: **Rwy 9**, trees beginning abeam DER, 316' right of centerline, up to 100' AGL/589' MSL. Trees beginning 765' from DER, 644' left of centerline, up to 95' AGL/545' MSL. Trees beginning 889' from DER, 150' right of centerline, up to 59' AGL/519' MSL. **Rwy 27**, trees beginning abeam DER, 350' right of centerline, up to 100' AGL/569' MSL. Trees beginning 212' from DER, 133' right of centerline, up to 100' AGL/569' MSL. Trees beginning 70' from DER, 513' left of centerline, up to 100' AGL/569' MSL. Building 148' from DER, 440' left of centerline, 14' AGL/484' MSL. Trees beginning 587' from DER, left and right of centerline, up to 100' AGL/549' MSL.

LURAY, VA

LURAY CAVERNS

TAKE-OFF MINIMUMS: **Rwys 4, 22**, 1000-3

DEPARTURE PROCEDURE: Climb visually so as to cross airport at or above 2000, then continue climb to 5000 via LUA 215° bearing before proceeding on course.

LYNCHBURG, VA

FALWELL

TAKE-OFF MINIMUMS: **Rwy 10**, 1100-2½ for climb in visual conditions. **Rwy 28**, NA-obstacle.

DEPARTURE PROCEDURE: **Rwy 10**, for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.

NOTE: **Rwy 10**, multiple trees 9' from departure end of runway, 87' right of centerline, up to 100' AGL/899' MSL. Multiple power lines 2896' from departure end of runway, 1192' right of centerline, up to 149' AGL/968' MSL.

LYNCHBURG RGNL/PRESTON GLENN

FIELD (LYH)

AMDT 8 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17**, 300-2¼ or std. w/ min. climb of 232' per NM to 1500. **Rwy 35**, std. w/ min. climb of 350' per NM to 3000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4**, climb heading 036° to 2200 before proceeding on course. **Rwy 17**, climb heading 169° to 1800 before turning right. **Rwy 22**, climb heading 216° to 1800 before turning right. **Rwy 35**, climb heading 349° to 3000 before turning left, or for climb in visual conditions: cross Lynchburg Rgnl/Preston Glenn Field at or above 2500' MSL before proceeding on course.

NOTE: **Rwy 4**, trees beginning 2029' from departure end of runway, 62' right of centerline up to 81' AGL/999' MSL. Trees beginning 1422' from departure end of runway, 3' left of centerline up to 76' AGL/995' MSL. Poles beginning 427' from departure end of runway, 483' right of centerline up to 44' AGL/1044' MSL. Obstruction lights on fence beginning 2' from departure end of runway, 500' right of centerline up to 30' AGL/948' MSL. Antenna on building 395' from departure end of runway, 277' right of centerline 15' AGL/954' MSL. Light 606' from departure end of runway, 599' right of centerline, 18' AGL/982' MSL. Building 400' from departure end of runway, 345' right of centerline, 12' AGL/951' MSL. **Rwy 17**, trees beginning 284' from departure end of runway, 77' left of centerline up to 277' AGL/1195' MSL. Trees beginning 265' from departure end of runway, 178' right of centerline up to 57' AGL/969' MSL. Obstruction light on pole 9326' from departure end of runway 333' left of centerline, 270' AGL/1188 MSL. **Rwy 22**, trees beginning 274' from departure end of runway, 245' right of centerline up to 41' AGL/979' MSL. Trees beginning 2616' from departure end of runway, 206' left of centerline up to 41' AGL/979' MSL. Poles beginning 2872' from departure end of runway, 603' right of centerline up to 44' AGL/982' MSL. **Rwy 35**, trees beginning 2955' from departure end of runway, 140' right of centerline up to 96' AGL/1014' MSL. Trees beginning 722' from departure end of runway, 71' left of centerline up to 119' AGL/1037' MSL. Pole 36' from departure end of runway 98' left of centerline, 25' AGL/943' MSL.

MANASSAS, VA

MANASSAS RGNL/HARRY P. DAVIS FIELD

NOTE: **Rwy 16R**, terrain 64' from departure end of runway, 136' right of centerline, 179' MSL. Numerous trees beginning 242' from departure end of runway, 53' right of centerline up to 100' AGL/279' MSL. Vehicle on road 886' from departure end of runway, 463' right of centerline, 15' AGL/214' MSL. Terrain 33' from departure end of runway, 427' left of centerline, 179' MSL. Numerous trees beginning 688' from departure end of runway, 40' left of centerline, up to 100' AGL/279' MSL. **Rwy 16L**, terrain 56' from departure end of runway, 177' left of centerline, 179' MSL. Numerous trees beginning 1911' from departure end of runway, 158' left of centerline, up to 83' AGL/292' MSL. Terrain 87' from departure end of runway, 386' right of centerline, 179' MSL. Numerous trees beginning 2559' from departure end of runway, 29' right of centerline, up to 100' AGL/273' MSL. **Rwy 34R**, sign 70' from departure end of runway, 91' right of centerline, 6' AGL/196' MSL. Terrain beginning 23' from departure end of runway, 222' right of centerline, up to 199' MSL. Vehicle on road 198' from departure end of runway, 9' right of centerline, 15' AGL/214' MSL. Numerous trees beginning 1860' from departure end of runway, 828' right of centerline, 70' AGL/280' MSL. Numerous trees beginning 2875' from departure end of runway, 484' left of centerline, up to 27' AGL/266' MSL. **Rwy 34L**, terrain 107' from departure end of runway, 409' right of centerline, 189' MSL. Numerous trees beginning 2802' from departure end of runway, 251' right of centerline, up to 27' AGL/266' MSL. Terrain 76' from departure end of runway, 154' left of centerline, 189' MSL. Vehicle on road 366' from departure end of runway, 19' left of centerline, 15' AGL/204' MSL. Numerous trees beginning 1603' from departure end of runway, 249' left of centerline, up to 43' AGL/252' MSL. Tower 3398' from departure end of runway, 1102' left of centerline, 68' AGL/274' MSL.

MARION/WYTHEVILLE, VA

MOUNTAIN EMPIRE

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1. **Rwy 26**, 800-1. DEPARTURE PROCEDURE: **Rwy 8**, climb direct to MK NDB then climb to 5300 via 073° bearing before proceeding on course. **Rwy 26**, climb to 5400 via 253° bearing from MK NDB before proceeding on course.

MARTINSVILLE, VA

BLUE RIDGE (MTV)
AMDT 3 10042 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12**, std. with a min. climb of 249' per NM to 2100 or 1900-3 for climb in visual conditions. **Rwy 30**, std. with a min. climb of 321' per NM to 4300 or 1900-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 12**, climb heading 125° to 2200 before proceeding on course. For climb in visual conditions: cross Blue Ridge airport at or above 2700 MSL before proceeding on course. **Rwy 30**, for climb in visual conditions: cross Blue Ridge airport at or above 2700 MSL before proceeding on course.

NOTE: **Rwy 12**, trees beginning 316' from DER, 320' left of centerline, up to 47' AGL/956' MSL. Trees beginning 38' from DER, 380' right of centerline, 82' AGL/941' MSL. **Rwy 30**, trees beginning 82' from DER, 9' right of centerline, up to 100' AGL/1058' MSL. Vehicle on road 638' from DER, 418' right of centerline, 15' AGL/974' MSL. Obstruction light on DME 1031' from DER, 304' right of centerline, 18' AGL/977' MSL. Fence 947' from DER, 400' right of centerline, 12' AGL/971' MSL. Trees beginning 102' from DER, 94' left of centerline, up to 77' AGL/1047' MSL.

MELFA, VA

ACCOMACK COUNTY

NOTE: **Rwy 3**, multiple trees beginning 41' from departure end of runway, 221' right of centerline, up to 84' AGL/128' MSL. Truck on road 204' from departure end of runway, 231' left of centerline, 15' AGL/61' MSL. Multiple trees beginning 249' from departure end of runway, 14' left of centerline, up to 106' AGL/155' MSL. Truck on road 494' from departure end of runway, 228' left of centerline, 15' AGL/62' MSL. Rod on obstruction light tower 862' from departure end of runway, 402' left of centerline, 55' AGL/99' MSL. **Rwy 21**, multiple trees beginning 27' from departure end of runway, 395' right of centerline, up to 91' AGL/135' MSL. Multiple trees 504' from departure end of runway, 403' left of centerline, up to 110' AGL/144' MSL.

MIDDLETOWN, DE

SUMMIT

TAKE-OFF MINIMUMS: **Rwy 35**, 300-1, or std. with a min. climb of 280' per NM to 400.

MITCHELLVILLE, MD

FREEWAY

TAKE-OFF MINIMUMS: **Rwy 18**, 300-1 or std. with a min. climb of 295' per NM to 500. **Rwy 36**, 300-1 or std. with a min. climb of 500' per NM to 600.

NOTE: **Rwy 18**, trees 328' from departure end of runway, 20' AGL/178' MSL. Trees 838' from departure end of runway, 337' left of centerline, 50' AGL/220' MSL. **Rwy 36**, cross departure end of runway at or above 35' AGL/203' MSL. Road/vehicle, 231' from departure end of runway, 17' AGL/185' MSL. Trees 332' from departure end of runway, 20' AGL/188' MSL. Power poles and lines crossing centerline, 2280' from departure end of runway, 186' AGL/345' MSL.

MONETA, VA

SMITH MOUNTAIN LAKE

TAKE-OFF MINIMUMS: **Rwys 5, 23**, 300-1.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb straight ahead to 1600 before proceeding on course.

NEWPORT NEWS, VA

NEWPORT NEWS/WILLIAMSBURG INTL

TAKE-OFF MINIMUMS: **Rwy 20**, 300-1/4 or standard with a minimum climb of 255' per NM to 300.

NOTE: **Rwy 2**, bush 295' from departure end of runway, 291' right of centerline 22' AGL/62' MSL. Tree 937' from departure end of runway, 603' left of centerline 81' AGL/131' MSL. Pole 1221' from departure end of runway, 487' right of centerline 31' AGL/81' MSL. Tree 1275' from departure end of runway, 517' left of centerline 79' AGL/132' MSL. Multiple trees beginning 1554' from departure end of runway, 298' left of centerline up to 88' AGL/141' MSL. Tree 1686' from departure end of runway, 428' right of centerline 61' AGL/114' MSL. Tree 1849' from departure end of runway, 598' right of centerline 72' AGL/125' MSL. T-L tower 3351' from departure end of runway, 1008' left of centerline 109' AGL/161' MSL. **Rwy 7**, tree 371' from departure end of runway, 588' left of centerline 36' AGL/73' MSL. T-L tower 4120' from departure end of runway, 1324' right of centerline 93' AGL/116' MSL. T-L tower 5625' from departure end of runway, 1345' left of centerline 133' AGL/191' MSL. **Rwy 20**, bush 96' from departure end of runway, 293' left of centerline 22' AGL/52' MSL. Stack 5977' from departure end of runway, 598' left of centerline 186' AGL/227' MSL. **Rwy 25**, tree 694' from departure end of runway, 549' right of centerline 42' AGL/65' MSL. Tree 1020' from departure end of runway, 703' right of centerline 23' AGL/97' MSL. Tree 1622' from departure end of runway, 529' left of centerline 59' AGL/79' MSL. Tree 2654' from departure end of runway, 335' right of centerline 86' AGL/106' MSL. Tree 3435 from departure end of runway, 1125' right of centerline 116' AGL/139' MSL.

NORFOLK, VA

CHESAPEAKE RGNL

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 500 before proceeding on course.

NOTE: **Rwy 5**, cross departure end of runway at or above 27' AGL/48' MSL. Trees 2200' from departure end of runway, 545' left of centerline, 81' AGL/102' MSL. **Rwy 23**, cross departure end of runway at or above 25' AGL/43' MSL. Trees 1600' from departure end of runway, 710' right of centerline, 62' AGL/82' MSL.

NORFOLK, VA (CON'T)

HAMPTON ROADS EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 10**, std. w/ min. climb of 217' per NM to 700, or alternatively w/ std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to departure end of runway or 1700-2¼ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 2**, climb heading 019° to 1600 before turning west. **Rwy 10**, climb heading 102° to 900 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Executive Airport at or above 1600 before proceeding on course.

Rwy 20, climb heading 199° to 1000 before turning North. **Rwy 28**, climb heading 282° to 1500 before turning North.

NOTE: **Rwy 2**, multiple trees beginning 693' from departure end of runway, 286' left of centerline, up to 100' AGL/124' MSL. Multiple trees beginning 917' from departure end of runway, 422' right of centerline, up to 100' AGL/124' MSL. **Rwy 10**, trees 688' from departure end of runway, 374' left of centerline, 61' AGL/85' MSL. Vehicle on road and multiple trees beginning 750' from departure end of runway, 359' right of centerline, up to 100' AGL/124' MSL. Tower 1.1 NM from departure end of runway, 1424' left of centerline, 175' AGL/192' MSL. **Rwy 20**, vehicle on road and multiple trees beginning 199' from departure end of runway, 250' left of centerline, up to 100' AGL/124' MSL. Vehicle on road and multiple trees beginning 595' from departure end of runway, 8' right of centerline, up to 100' AGL/124' MSL. **Rwy 28**, multiple trees beginning 2711' from departure end of runway, 366' left of centerline, up to 100' AGL/124' MSL. Vehicle on road 3' from departure end of runway, 112' right of centerline, 17' AGL/34' MSL. Multiple trees beginning 2595' from departure end of runway, 362' right of centerline, up to 100' AGL/124' MSL.

NORFOLK, VA (CON'T)

NORFOLK INTL

NOTES: **Rwy 5**, mobile crane 4091' from departure end of runway, 1249' right of centerline, 150' AGL/163' MSL. Multiple ship masts beginning 2761' from departure end of runway, 22' right of centerline, up to 100' AGL/100' MSL. Multiple ship masts beginning 2564' from departure end of runway, 133' left of centerline, up to 100' AGL/100' MSL. Obstruction light on pole 3978' from departure end of runway, 931' left of centerline, 138' AGL/146' MSL. Multiple towers beginning 4045' from departure end of runway, 982' left of centerline, up to 138' AGL/146' MSL. Obstruction light on pole 2898' from departure end of runway, 811' right of centerline, 84' AGL/98' MSL. Antenna 4115' from departure end of runway, 1585' right of centerline, 117' AGL/131' MSL. Tower 2974' from departure end of runway, 772' right of centerline, 90' AGL/98' MSL, obstruction light on pole 2696' from departure end of runway, 1063' left of centerline, 84' AGL/91' MSL. Bush 29' from departure end of runway, 307' right of centerline, 6' AGL/20' MSL. Tree 1459' from departure end of runway, 159' left of centerline, 41' AGL/55' MSL. Tower 2938' from departure end of runway, 1254' left of centerline, 89' AGL/94' MSL. Tree 1399' from departure end of runway, 201' right of centerline, 38' AGL/52' MSL. Sign 82' from departure end of runway, 301' left of centerline, 2' AGL/19' MSL. Terrain 23' from departure end of runway, 227' left of centerline, 0' AGL/17' MSL. **Rwy 14**, tree 2541' from departure end of runway, 432' right of centerline, 101' AGL/121' MSL. Multiple trees beginning 443' from departure end of runway, 398' left of centerline, up to 75' AGL/95' MSL. Pole 1410' from departure end of runway, 254' right of centerline, 45' AGL/62' MSL. **Rwy 23**, rod on obstruction light pole 1012' from departure end of runway, 650' right of centerline, 56' AGL/73' MSL. Multiple trees beginning 619' from departure end of runway, 584' left of centerline, up to 81' AGL/98' MSL. Obstruction light on pole 1433' from departure end of runway, 738' left of centerline, 54' AGL/71' MSL. Multiple trees beginning 323' from departure end of runway, 504' right of centerline, up to 26' AGL/43' MSL. Pole 2165' from departure end of runway, 840' right of centerline, 57' AGL/74' MSL. **Rwy 32**, multiple trees beginning 17' from departure end of runway, 460' right of centerline, up to 81' AGL/98' MSL. Multiple trees and poles beginning 60' from departure end of runway, 333' left of centerline, up to 87' AGL/92' MSL. Road 207' from departure end of runway, 231' right of centerline, 12' AGL/29' MSL. Multiple obstruction lights on towers 201' from departure end of runway, 135' left of centerline, up to 12' AGL/27' MSL.

NORFOLK NS (CHAMBERS

FIELD)(KNGU)

NORFOLK, VA
08269

Rwy 28: 300-1½*

* Or standard with minimum climb of 235'/NM (DoD) or 245'/NM (civil) to 300.

TAKE-OFF OBSTACLES: **Rwy 10:** Trees with a maximum height of 100' within 1500' of departure end of rwy. Cross departure end of rwy at or above 35' AGL/48' MSL.

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

OAKLAND, MD

GARRETT COUNTY (2G4)
ORIG 08101 (FAA)

NOTE: **Rwy 9**, Multiple trees beginning 75' from departure end of runway, 94' left of centerline, up to 100' AGL/2939' MSL. Multiple trees beginning 76' from departure end of runway, 47' right of centerline, up to 100' AGL/2939' MSL. **Rwy 27**, Multiple trees beginning 15' from departure end of runway, 334' left of centerline, up to 100' AGL/3019' MSL. Multiple trees beginning 19' from departure end of runway, 107' right of centerline, up to 100' AGL/3019' MSL.

OCEAN CITY, MD

OCEAN CITY MUNI

TAKE-OFF MINIMUMS: **Rwys 2, 32**, 400-2 or std. with a min. climb of 260' per NM to 500.

OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

VIRGINIA BEACH, VA. 09351

TAKE-OFF OBSTACLES: **Rwy 5L**, Trees 115' MSL, 3706' from DER, 97' right of centerline. **Rwy 5R**, Trees 115' MSL, 3706' from DER, 603' left of centerline. **Rwy 14L**, Trees 105' MSL, 2792' from DER, 7' left of centerline. **Rwy 14R**, Trees 105' MSL, 2792' from DER, 708' left of centerline.

ORANGE, VA

ORANGE COUNTY

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1.
DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1500 before turning.

PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

PATUXENT RIVER, MD 09267

Rwy 6, Obstacle identification surface begins 15' above DER.

Rwy 14, Obstacle identification surface begins 35' above DER.

Rwy 20, Obstacle identification surface begins 20' above DER.

Rwy 24, Obstacle identification surface begins 15' above DER.

TAKE-OFF OBSTACLES: **Rwy 6**, Pole 63' AGL/83' MSL, 1967' from DER, 981' left of centerline. **Rwy 14**, Trees 42' AGL/57' MSL, 190' from DER, 223' left of centerline. Two lane road crossing rwy thld max ht 17' AGL/33' MSL, 193' from DER. Pole 34' AGL/50' MSL, 315' from DER, 198' left of centerline. Trees 43' AGL/59' MSL, 520' from DER, 637' right of centerline. **Rwy 20**, Trees 44' AGL/81' MSL, 1555' from DER, 845' right of centerline. Trees 56' AGL/93' MSL, 2057' from DER, 778' right of centerline. Trees 67' AGL/104' MSL, 2077' from DER, 818' right of centerline. Trees 93' AGL/130' MSL, 3029' from DER, 32' left of centerline. **Rwy 24**, 43' AGL/81' MSL, 1682' from DER, 582' left of centerline. Trees 57' AGL/93' MSL, 2015' from DER, 965' left of centerline. Trees 66' AGL/104' MSL, 2056' from DER, 948' left of centerline.

PETERSBURG, VA

DINWIDDIE COUNTY (PTB)
ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 32, 14**, NA-obstacles.

NOTE: **Rwy 5**, numerous trees beginning 911' from departure end of runway, 551' left of centerline, up to 65' AGL/254' MSL. Fence 161' from departure end of runway, 472' right of centerline, 7' AGL/196' MSL. Tree 1031' from departure end of runway, 690' right of centerline, 57' AGL/256' MSL. **Rwy 23**, numerous trees beginning 2615' from departure end of runway, 69' right of centerline, up to 80' AGL/289' MSL. Fence 10' from departure end of runway, 476' left of centerline, 10' AGL/199' MSL. Numerous trees beginning 819' from departure end of runway, 528' left of centerline, up to 72' AGL/281' MSL.

PHILLIPS AAF (KAPG)

ABERDEEN PROVING GROUND, MD . . 07270

TAKE-OFF OBSTACLES: **Rwy 4**, vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL. Tree 1126' from DER, 118' left of centerline, 29' AGL/88' MSL. **Rwy 22**, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL. Multiple trees beginning 398' from DER, 311' right of centerline, up to 50' AGL/89' MSL. Tree 1094' from DER, 49' left of centerline, 43' AGL/62' MSL.

QUANTICO MCAF (TURNER FIELD) (KNYG)

QUANTICO, VA 09295

Diverse departures not authorized.

Rwy 2, 400-2½*

Rwy 20, 300-1¼**

* Or standard with minimum civil climb of 470 ft/NM to 600, minimum military climb of 410 ft/NM to 500.

** Or standard with minimum civil climb of 360 ft/NM to 400, minimum military climb of 320 ft/NM to 400.

DEPARTURE PROCEDURE: **Rwy 2**, Climbing right turn to 2000 direct BRV VORTAC or to assigned heading for radar vectors. **Rwy 20**, Climb to 2000 direct BRV VORTAC or as assigned for radar vectors.

TAKE-OFF OBSTACLES: **Rwy 2**, Multiple trees on rising terrain 100' AGL/296' MSL, 4075' from DER, 803' left of centerline. Multiple trees on rising terrain 100' AGL/197' MSL, 5763' from DER, 106' left of centerline. Multiple trees 100' AGL/240' MSL, 5763' from DER, 509' right of centerline. Smokestack 100' MSL, 2310' from DER, 401' left of centerline. Multiple smokestacks up to 397' MSL, 2 NM from DER, 4175' right of centerline. **Rwy 20**, Terrain 27' MSL, starting 347' from DER, 192' right of centerline. Trees 34' AGL/213' MSL, 5749' from DER, 1878' right of centerline.

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

QUINTON, VA

NEW KENT COUNTY (W96)

AMDT 1 10154 (FAA)

NOTE: **Rwy 10**, trees beginning at DER, left and right of centerline, up to 100' AGL/239' MSL. **Rwy 28**, trees beginning at DER, left and right of centerline, up to 100' AGL/239' MSL.

RICHLANDS, VA

TAZEWELL COUNTY

TAKE-OFF MINIMUMS: **Rwy 7**, 300-1 or std. with a min. climb of 430' per NM to 3000. **Rwy 25**, 300-1 or std. with a min. climb of 280' per NM to 2900.

DEPARTURE PROCEDURE: **Rwy 7**, climb runway heading to 4700 before proceeding southbound.

Rwy 25, climb runway heading to 4100 before proceeding southbound.

RICHMOND, VA

CHESTERFIELD COUNTY

TAKE-OFF MINIMUMS: **Rwy 15**, 800-1 or std. with a min. climb of 280' per NM to 1200. **Rwy 33**, 1200-1, or std. with a min. climb of 220' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1200' before proceeding on course.

Rwy 33, climb runway heading to 1700' before proceeding on course.

NOTE: **Rwy 15**, 18' AGL pole 1315' from departure end of runway, 304' left of centerline. **Rwy 33**, 84' AGL tree 2399' from departure end of runway, 84' left of centerline.

RICHMOND, VA (CON'T)

RICHMOND INTL (RIC)

AMDT 1 10098 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2**, 200-1¼ or std. w/ min. climb of 230' per NM to 400, or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1600' prior to DER.

NOTE: **Rwy 2**, aircraft on surface beginning 3' from DER, 202' right of centerline, up to 65' AGL/232' MSL. Trees and bushes beginning 104' from DER, 223' left of centerline, up to 100' AGL/251' MSL. Trees beginning 2918' from DER, 367' right of centerline, up to 100' AGL/260' MSL. **Rwy 7**, trees beginning 1208' from DER, 798' right of centerline, up to 100' AGL/259' MSL. Trees beginning 1347' from DER, 283' left of centerline, up to 100' AGL/259' MSL. **Rwy 20**, hangar 817' from DER, 665' right of centerline, 43' AGL/212' MSL. Trees beginning 2307' from DER, 1065' left of centerline, up to 100' AGL/235' MSL. Trees beginning 2645' from DER, 759' right of centerline, up to 100' AGL/255' MSL. Pole 3226' from DER, 424' right of centerline, 79' AGL/248' MSL. **Rwy 25**, vehicles on road beginning 390' from DER, on centerline, up to 15' AGL/184' MSL. Train on railroad beginning 545' from DER, on centerline, up to 23' AGL/192' MSL. Tower 799' from DER, 562' left of centerline, 16' AGL/185' MSL. Trees beginning 2414' from DER, 285' right of centerline, up to 100' AGL/279' MSL. Multiple poles beginning 3056' from DER, 565' left of centerline, up to 83' AGL/252' MSL. Trees beginning 3176' from DER, 357' left of centerline, up to 100' AGL/269' MSL. **Rwy 34**, aircraft on surface beginning 12' from DER, 192' left of centerline, up to 65' AGL/230' MSL. Hangar and light pole beginning 1103' from DER, 732' left of centerline, up to 41' AGL/200' MSL. Trees beginning 2202' from DER, 1052' right of centerline, up to 100' AGL/232' MSL. Trees beginning 2689' from DER, 998' left of centerline, up to 100' AGL/237' MSL.

RICHMOND/ASHLAND, VA

HANOVER COUNTY MUNI (OFF)

ORIG 09239 (FAA)

NOTE: **Rwy 16**, trees beginning 48' from DER, 479' left of centerline, up to 101' AGL/291' MSL. Poles beginning 1077' from DER, 36' left of centerline, up to 36' AGL/236' MSL. Pole 1120' from DER 166' right of centerline 30' AGL/230' MSL. Trees beginning 1307' from DER, 26' left of centerline, up to 108' AGL/298' MSL. Trees beginning 1431' from DER, 319' right of centerline, up to 104' AGL/294' MSL. **Rwy 34**, road and trees beginning 149' from DER, 345' right of centerline, up to 47' AGL/247' MSL. Road and trees beginning 410' from DER, 386' left of centerline, up to 103' AGL/293' MSL. Poles beginning 660' from DER, on centerline, up to 39' AGL/239' MSL. Trees beginning 1402' from DER, 445' right of centerline, up to 100' AGL/290' MSL. Trees beginning 2714' from DER, 487' right of centerline, up to 104' AGL/304' MSL.

RIDGELY, MD

RIDGELY AIRPARK

NOTE: **Rwy 12**, multiple trees beginning 592' from departure end of runway, 6' left of centerline, up to 100' AGL/160' MSL. Multiple trees beginning 239' from departure end of runway, 338' right of centerline, up to 100' AGL/160' MSL.



ROANOKE, VA

ROANOKE RGNL/ WOODRUM FIELD (ROA)
AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 33**, NA - obstacles.

Rwy 24, std. w/ min. climb of 216' per NM to 2600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 154° to intercept the ROA VORTAC R-122 to 4000 before proceeding on course. **Rwy 24**, climb west on I-SZK LDA localizer course on 4200 to DIXXY Int'l-SZK 15.25 DME before proceeding on course.

NOTE: **Rwy 15**, trees 1.18 NM from departure end of runway, 2122' left of centerline, 60' AGL/1321' MSL. **Rwy 24**, bush 86' from departure end of runway, 385' left of centerline, 4' AGL/1163' MSL. Tree 150' from departure end of runway, 415' right of centerline, 60' AGL/1171' MSL. Tree 737' from departure end of runway, 454' right of centerline, 60' AGL/1179' MSL. Tree 1164' from departure end of runway, 726' right of centerline, 60' AGL/1206' MSL.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

ORIG 07354 (FAA)

NOTE: **Rwy 5**, trees and antennas beginning 961' from departure end of runway, 49' left of centerline, up to 83' AGL/135' MSL. Trees beginning 2769' from departure end of runway, 5' right of centerline, up to 85' AGL/136' MSL. **Rwy 23**, trees beginning 514' from departure end of runway, 518' left of centerline, up to 68' AGL/118' MSL. Trees and antenna beginning 774' from departure end of runway, 303' right of centerline, up to 76' AGL/127' MSL. Trees beginning 2835' from departure end of runway, 186' right of centerline, up to 75' AGL/125' MSL. **Rwy 32**, trailer, hangar and obstruction light beginning 120' from departure end of runway, 509' left of centerline, up to 23' AGL/72' MSL. Trees beginning 2215' from departure end of runway, 140' left of centerline, up to 79' AGL/128' MSL.

SALUDA, VA

HUMMEL FIELD

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 1000 before turning on course.

NOTE: **Rwy 1**, 23' AGL tree left of departure end of runway, 65' AGL tree 663' from departure end of runway, 129' left of centerline. **Rwy 19**, 26' AGL tree 237' from departure end of runway, 116' right of centerline.

SOUTH BOSTON, VA

WILLIAM M. TUCK

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1. **Rwys 5, 23**, NA.

NOTE: **Rwy 1**, 72' AGL tower 324' from departure end of runway, 283' left of runway centerline.

SOUTH HILL, VA

MECKLENBURG-BRUNSWICK RGNL (AVC)

AMDT 2 10210 (FAA)

NOTE: **Rwy 1**, train on tracks 118' from DER, 514' left of centerline, 23' AGL/452' MSL. Trees beginning 181' from DER, 408' left of centerline, up to 80' AGL/500' MSL. Trees beginning 1858' from DER, 600' right of centerline, up to 71' AGL/500' MSL. **Rwy 19**, trees beginning 191' from DER, 13' left of centerline, up to 77' AGL/457' MSL. Trees beginning 1176' from DER, 57' right of centerline, up to 76' AGL/500' MSL.

STAFFORD, VA

STAFFORD RGNL

DEPARTURE PROCEDURE: **Rwy 15**, climbing left turn to 2000, intercept and proceed via BRV R-310 to BRV VORTAC, before proceeding on course. **Rwy 33**, climbing left turn to 2000, intercept and proceed via BRV R-306 to BRV VORTAC, before proceeding on course. NOTE: **Rwy 33**, cross departure end of runway at or above 34' AGL/246' MSL.

STAUNTON-WAYNESBORO-HARRISONBURG, VA

SHENANDOAH VALLEY RGNL (SHD)

AMDT 6 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5**, std. w/ min. climb of 273' per NM to 3800, or 2200-2½ for climb in visual conditions. **Rwy 23**, standard, or 2200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5**, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course. **Rwy 23**, climb heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.

NOTE: **Rwy 5**, trees 1720' from DER, 635' right of centerline, up to 100' AGL/1279' MSL. **Rwy 23**, tree 679' from DER, 616' left of centerline, 35' AGL/1194' MSL.

STEVENSVILLE, MD

BAY BRIDGE

TAKE-OFF MINIMUMS: **Rwy 29**, 500-3 or std. w/ min. climb of 317' per NM to 800.

NOTE: **Rwy 11**, road 354' from departure end of runway, on centerline, 17' AGL/35' MSL. Multiple trees beginning 1471' from departure end of runway, 32' left of centerline, up to 100' AGL/119' MSL. Multiple trees beginning 1485' from departure end of runway, 16' left of centerline, up to 100' AGL/119' MSL. **Rwy 29**, twin bridges 2.25 NM from departure end of runway, 2767' right of centerline, 410' AGL/410' MSL.



SUFFOLK, VA

SUFFOLK EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 4, 7, 22**, 300-1. **Rwy 25**, 300-1 or std. w/ a min. climb of 260' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200' /NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.

NOTE: **Rwy 4**, trees 1050' from departure end of runway, 250' left of centerline, up to 100' AGL/169' MSL. Trees 1076' from departure end of runway, 105' left of centerline, up to 100' AGL/169' MSL. Powerline 1698' from departure end of runway, 825' right of centerline, 105' AGL/169' MSL. Powerline 3056' from departure end of runway, 524' right of centerline, 105' AGL/174' MSL. **Rwy 7**, trees 1143' from departure end of runway, 688' left of centerline, up to 100' AGL/169' MSL. Powerline 1211' from departure end of runway, 717' right of centerline, 105' AGL/169' MSL. Powerline 2176' from departure end of runway, 259' left of centerline, 105' AGL/169' MSL. Trees 2430' from departure end of runway, 118' right of centerline, up to 100' AGL/169' MSL. Powerline 3140' from departure end of runway, 1263' left of centerline, 105' AGL/174' MSL. **Rwy 22**, road 536' from departure end of runway, 62' left of centerline, 15' AGL/84' MSL. Trees 1403' from departure end of runway, 765' left of centerline, up to 100' AGL/169' MSL. Trees 3595' from departure end of runway, 792' right of centerline, up to 100' AGL/174' MSL. **Rwy 25**, road 198' from departure end of runway, 33' right of centerline, 15' AGL/89' MSL. Trees 805' from departure end of runway, 423' right of centerline, up to 100' AGL/169' MSL. Trees 3258' from departure end of runway, 57' right of centerline, up to 100' AGL/174' MSL.

TANGIER, VA

TANGIER ISLAND (TGI)

ORIG 09015 (FAA)

NOTE: **Rwy 2**, vehicle on road 343' from departure end of runway, on centerline, 15' AGL/19' MSL. Boat masts 638' from departure end of runway, 632' right to 755' left of centerline, up to 63' MSL. **Rwy 20**, buildings beginning 7' from departure end of runway, 206' left of centerline, 45' AGL/50' MSL. Rock wall at departure end of runway, 57' right of centerline, 4' AGL/8' MSL.

TAPPAHANNOCK, VA

TAPPAHANNOCK-ESSEX COUNTY

TAKE-OFF MINIMUMS: **Rwy 10**, 300-1½ or std. w/ min. climb of 303' per NM to 500. **Rwy 28**, 300-1 or std. w/ min. climb of 366' per NM to 500.

NOTE: **Rwy 10**, terrain 6' from departure end of runway, 20' left of centerline, up to 135' MSL. Terrain 29' from departure end of runway, 281' left of centerline, up to 139' MSL. **Rwy 28**, terrain beginning 12' from departure end of runway, 5' right of centerline, up to 151' MSL.

WALLOPS ISLAND, VA

WALLOPS FLIGHT FACILITY (WAL)

ORIG 09127 (FAA)

NOTE: **Rwy 4**, trees beginning 1254' from DER, 741' left of centerline, up to 100' AGL/109' MSL. Trees beginning 1814' from DER, 79' right of centerline, up to 100' AGL/134' MSL. **Rwy 10**, trees beginning 1252' from DER, 818' left of centerline, up to 100' AGL/124' MSL. **Rwy 17**, trees beginning 169' from DER, 218' left of centerline, up to 100' AGL/119' MSL. **Rwy 22**, trees beginning 793' from DER, 315' left of centerline, up to 100' AGL/129' MSL. **Rwy 28**, trees beginning 945' from DER, 495' right of centerline, up to 100' AGL/139' MSL. **Rwy 35**, trees beginning 3' from DER, 394' left of centerline, up to 100' AGL/124' MSL. Trees beginning 21' from DER, 219' right of centerline, up to 100' AGL/124' MSL.

WAKEFIELD, VA

WAKEFIELD MUNI

DEPARTURE PROCEDURE: Climb straight ahead to 500 before proceeding on course.

WARRENTON, VA

WARRENTON-FAUQUIER (HWY)

ORIG 09099 (FAA)

NOTE: **Rwy 15**, trees 436' from DER, 518' right of centerline, 100' AGL/439' MSL. Vehicle on road 647' from DER, 649' right of centerline, 15' AGL/354' MSL. Trees 1034' from DER, 763' left of centerline, 100' AGL/449' MSL. Trees 1924' from DER, 781' right of centerline, 100' AGL/459' MSL. Trees beginning 2239' from DER, 41' left of centerline, up to 100' AGL/459' MSL. **Rwy 33**, trees beginning 1272' from DER, 59' right of centerline, up to 41' AGL/370' MSL. Trees beginning 2610' from DER, 116' left of centerline, up to 74' AGL/413' MSL.

WASHINGTON, DC

RONALD REAGAN WASHINGTON NATIONAL

TAKE-OFF MINIMUMS: **Rwy 22**, 400-2½ or std. with a min. climb of 210' per NM to 500. **Rwy 33**, 700-3 or std. with a min. climb of 260' per NM to 700. **Rwy 1**, 600-2 or std. with a min. climb of 370' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1**, left turn as soon as practicable, intercept DCA R-328. Climb to 5000 or as assigned. **Rwy 19**, climb heading 184° to 500 before turning right. **Rwy 33**, intercept DCA R-328. Climb to 5000 or as assigned.

NOTE: **Prohibited area**, P-56, 1.5 NM north of airport.

WASHINGTON DULLES INTL (IAD)

AMDT 1 08325 (FAA)

NOTE: **Rwy 1L**, tower 1918' from departure end of runway, 680' left of centerline, 56' AGL/330' MSL.

Rwy 1C, tree 2814' from departure end of runway, 1030' left of centerline, 86' AGL/345' MSL. **Rwy 1R**, post 12' from departure end of runway, 223' right of centerline, 8' AGL/294' MSL. **Rwy 12**, tree 520' from departure end of runway, 604' left of centerline, 28' AGL/307' MSL.

Rwy 30, trees beginning 161' from departure end of runway, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from departure end of runway, 600' right of centerline, up to 64' AGL/383' MSL.

WEST POINT, VA

MIDDLE PENINSULA RGNL (FYJ)
ORIG 08157 (FAA)

NOTE: **Rwy 10**, multiple trees beginning 86' from departure end of runway, left and right of centerline, up to 100' AGL/129' MSL. **Rwy 28**, multiple trees beginning 33' from departure end of runway, left and right of centerline, up to 100' AGL/119' MSL. Ship mast 3427' from departure end of runway, left and right of centerline, 135' AGL/135' MSL.

WESTMINSTER, MD

CARROLL COUNTY RGNL/JACK B. POAGE
FIELD

TAKE-OFF MINIMUMS: **Rwy 16**, 400-1 or std. with a min. climb of 210' per NM to 1300. **Rwy 34**, 300-1 or std. with a min. climb of 320' per NM to 1000.

NOTE: **Rwy 16**, 87' AGL trees 644' from departure end of runway. **Rwy 34**, 102' AGL trees 116' from departure end of runway, 220' right of centerline.

CLEARVIEW AIRPARK (2W2)

ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32**, 300-2¼ or std. w/ min. climb of 290' per NM to 1200.

NOTE: **Rwy 14**, vehicles and aircraft on road/taxiway 14' from DER, 47' right to left of centerline, 15' AGL/ 834' MSL. Trees beginning 35' from DER, 200' left of centerline, up to 100' AGL/939' MSL. Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/ 919' MSL. **Rwy 32**, vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL. Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL. Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

WILLIAMSBURG, VA

WILLIAMSBURG-JAMESTOWN

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1.

WILMINGTON, DE

NEW CASTLE

TAKE-OFF MINIMUMS: **Rwy 19**, 300-1 or std. w/ min. climb of 266' per NM to 300.

NOTE: **Rwy 1**, multiple trees beginning 751' from departure end of runway, 32' left of centerline, up to 59' AGL/120' MSL, tree 1219' from departure end of runway, 482' right of centerline, 57' AGL/118' MSL, bush 118' from departure end of runway, 385' left of centerline, 4' AGL/65' MSL. **Rwy 9**, multiple trees beginning 1229' from departure end of runway, 30' right of centerline up to 62' AGL/133' MSL, tree 975' from departure end of runway, 66' left of centerline, 53' AGL/124' MSL, light pole 948' from departure end of runway, 596' right of centerline, 44' AGL/115' MSL, tree 1740' from departure end of runway, 458' left of centerline, 83' AGL/134' MSL, light pole 945' from departure end of runway, 316' right of centerline, 38' AGL/109' MSL, rod on building 916' from departure end of runway, 457' left of centerline, 29' AGL/100' MSL. **Rwy 14**, obstacle light 553' from departure end of runway, 440' left of centerline, 29' AGL/103' MSL, rod on obstacle light 606' from departure end of runway, 615' left of centerline, 19' AGL/93' MSL. **Rwy 19**, antenna on obstruction light tower 4469' from departure end of runway, 1684' right of centerline, 153' AGL/228' MSL, tree 1575' from departure end of runway, 850' right of centerline, 45' AGL/120' MSL, obstruction light on sign 971' from departure end of runway, 448' left of centerline, 28' AGL/103' MSL. **Rwy 27**, tree 697' from departure end of runway, 533' left of centerline, 68' AGL/ 147' MSL. Tree 1110' from departure end of runway, 584' right of centerline, 38' AGL/117' MSL, pole 793' from departure end of runway, 615' right of centerline, 28' AGL/ 107' MSL, bush 408' from departure end of runway, 415' left of centerline, 12' AGL/91' MSL. **Rwy 32**, tree 711' from departure end of runway, 207' right of centerline, 29' AGL/ 104' MSL, tree 1162' from departure end of runway, 83' right of centerline, 32' AGL/107' MSL.

WINCHESTER, VA

WINCHESTER RGNL

TAKE-OFF MINIMUMS: **Rwy 32**, 800-2 or std. with a min. climb of 210' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 32**, climb runway heading to 1700 before turning on course.

WISE, VA

LONESOME PINE (LNP)

AMDT 3 10210 (FAA)

DEPARTURE PROCEDURE: **Rwy 6**, climb on heading 062° to 3600 before proceeding on course.

Rwy 24, climb on heading 247° to 4900 before proceeding on course.

NOTE: **Rwy 6**, trees beginning 775' from DER, left and right of centerline, up to 100' AGL/2801' MSL. Terrain beginning 86' from DER, left and right of centerline, up to 2728' MSL. **Rwy 24**, trees beginning 159' from DER, left and right of centerline, up to 100' AGL/2794' MSL. Obstruction light on LOC 308' from DER 22' left of centerline, 8' AGL/2678' MSL. Obstruction light on LOC 304' from DER 22' right of centerline, 8' AGL/2678' MSL. Obstruction light on LOC/DME 306' from DER, 189' right of centerline, 15' AGL/2685' MSL. Terrain 159' from DER, 363' left of centerline, 2676' MSL.

AIRPORT DIAGRAM

AL-443 (FAA)

WASHINGTON, D.C.

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA - AVOID SURFACE TO 18,000 MSL.

ATIS

132.65

WASHINGTON TOWER

119.1 257.6

134.35 HELICOPTERS

GND CON

121.7 257.6

CLNC DEL

128.25

FIELD
ELEV
15

VEHICLE LANE REMAIN
CLEAR WHILE TAXIINGNORTH
HANGARS

38° 51.5' N

COMMUTER PARKING

REPORTING POINTS

NORTH PIER GATES 35-45

TERMINAL C

CONTROL TOWER

228

REPORTING POINTS

CENTER PIER GATES 23-34

REPORTING POINTS

TERMINAL B

SOUTH PIER GATES 15-22

GATES 10-14

ASDE-X Surveillance System in use.
Pilots should operate transponders
with Mode C on all twys and rwys.

38° 51.0' N

GENERAL AVIATION
TERMINALTERMINAL A
GATES 1-9

NO TAXI

NWS

SOUTH
HANGARSGENERAL AVIATION
PARKINGFIRE
STATION

HOLDING APRON 4

VEHICLE LANE REMAIN
CLEAR WHILE TAXIING

CAUTION: BE ALERT TO
RUNWAY CROSSING CLEARANCES.
READBCK OF ALL RUNWAY
HOLDING INSTRUCTIONS IS REQUIRED.

38° 50.5' N

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WASHINGTON

RONALD REAGAN WASHINGTON NATL (DCA) 3 S UTC-5(-4DT) N38°51.13' W77°02.26'

WASHINGTON

15 B S2 FUEL JET A LRA Class I, ARFF Index C NOTAM FILE DCA

COPTER

RWY 01-19: H6869X150 (ASPH-GRVD) S-110, D-200, 2D-360

H-10H, 121, L-29E, 34F, 361, A

PCN 57 F/B/X/T HIRL CL

IAP, AD

RWY 01: ALSF2. TDZL. Twr.

RWY 19: MALSF. VASI(V12)—GA 3.0°TCH 50'. Rgt tfc.

RWY 15-33: H5204X150 (ASPH-GRVD) S-110, D-200,

2D-360 PCN 57 F/B/X/T HIRL

RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 46'. Fence. Rgt tfc.

RWY 33: REIL. VASI(V4L)—GA 3.0°TCH 53'. Trees.

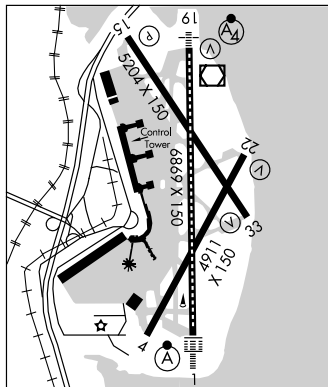
RWY 04-22: H4911X150 (ASPH-GRVD) S-110, D-200,

2D-360 PCN 57 F/B/X/T MIRL

RWY 04: REIL. Pole.

RWY 22: REIL. VASI(V4L)—GA 3.0°TCH 53'. Ground. Rgt tfc.

AIRPORT REMARKS: Attended continuously. Rwy 22 CLOSED exc for taxi indef. Rwy 04 CLOSED exc for txf and taxi indef. Be advised some aircrews mistake Rwy 15 for Rwy 19. Left-hand turn-offs from Rwy 33 to Twy K prohibited. Hold block for Rwy 04 closed for acft parking 0200-1330Z±. Flocks of birds on and in/ov arpt, frequent seagull and geese and duck populations airborne over adjacent river areas. When South apchs are in progress high ints lgts will be flashing on Key, Roosevelt, Memorial, and George Mason Bridges to assist pilots in remaining over Potomac River. Lgts controlled by twr. Three obstruction lgt poles on apch to Rwy 04 15' high, 600' left-600' right, 900' from AER. Lighting from vehicle parking lot located 1000 ft SW of Rwy 01 could give false indications of being part of Rwy 01 apch lighting system during periods of reduced visibility and low ceilings. Rwy 04 REIL OTS indef. Rwy 22 REIL OTS indef. Rwy 22 VASI OTS indef. ASDE-X surveillance system in use. Pilots should operate transponders with Mode C on all twys and rwys. Rwy 19X exists to support the DCA LDA associated with the ILS. Twy P ends at Gate #5. Acft arriving/departing the general aviation parking area are prohibited from taxiing between air carrier pushback ops and the gates. Training flights that include multiple apchs and/or touch and go ops rqr prior permission from the arpt manager. Ldg fees. NOTE: See Special Notices —District of Columbia Ronald Reagan Washington National Airport. Noise Abatement and Prohibited Area (P-56) Avoidance Procedures and Continuous Power Facilities.

**WEATHER DATA SOURCES:** ASOS (703) 412-8140. LLWAS. TDWR.**COMMUNICATIONS:** D-ATIS 132.65 (703-419-3917) UNICOM 122.95⑤ **POTOMAC APP CON** 118.3 (EAST) 124.7 (WEST)**WASHINGTON TOWER** 119.1 (134.35 Helicopters) **GND CON** 121.7 **CLNC DEL/PRE TAXI CLNC** 128.25⑤ **POTOMAC DEP CON** 121.05 (WEST 10,000' up to FL 230) 118.95 (WEST 9500' and blo) 125.65 (EAST 9500' and blo) 126.55 (EAST 10,000' up to FL 190)**AIRSPACE:** CLASS B See VFR Terminal Area Chart.**RADIO AIDS TO NAVIGATION:** NOTAM FILE DCA.**WASHINGTON (L) VOR/DME** 111.0 DCA Chan 47 N38°51.57' W77°02.19' at fld. 9/09W.**GEORGETOWN NDB (MHW)** 323 GTN N38°55.79' W77°07.45' 148° 6.2 NM to fld. Unmonitored.**OXONN NDB (MHW/LOM)** 332 DC N38°45.96' W77°01.60' 005° 5.2 NM to fld. Unmonitored.**ILS/DME** 109.9 I-DCA Chan 36 Rwy 01. Class IIE. LOM OXONN NDB.

DME unusable byd 14 NM blo 1600'.

LDA/DME 109.9 I-ASO Chan 36 Rwy 19. GS not authorized blo 1100'. DME unusable byd 12 NM.

DME unusable byd 25° right of course. LOC unusable byd 25° right of course.

LDA/DME 108.5 I-VWH Chan 22 Rwy 19. LOC only. LOC unusable byd 25° left and right of course.

COMM/NAV/WEATHER REMARKS: Local flow traffic management-turbo jet arrivals Ronald Reagan Washington National Tower in conjunction with the Washington ARTCC, has implemented a metering plan designed to minimize low altitude holding, reduce radar vectors and speeds requiring the extension of flaps and to provide for an orderly flow of traffic to the final approach course. Dependent upon the airport acceptance rate, in-trail spacing between successive arrivals may necessitate using speed adjustments prior to reaching the Washington Terminal Area. Descent, under most conditions, will be from arrival fixes established 30 to 36 miles from the runway end. Advance notice as to where to expect descent and when to expect base leg should be given. It is imperative that pilots control their descent at a uniform rate to preclude intermediate altitude restrictions. (Procedures are based on a near idle thrust. 300 feet per mile descent in still air conditions.)

ST-443 (FAA)

BILIT ONE ARRIVAL (RNAV)

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL
WASHINGTON, DC

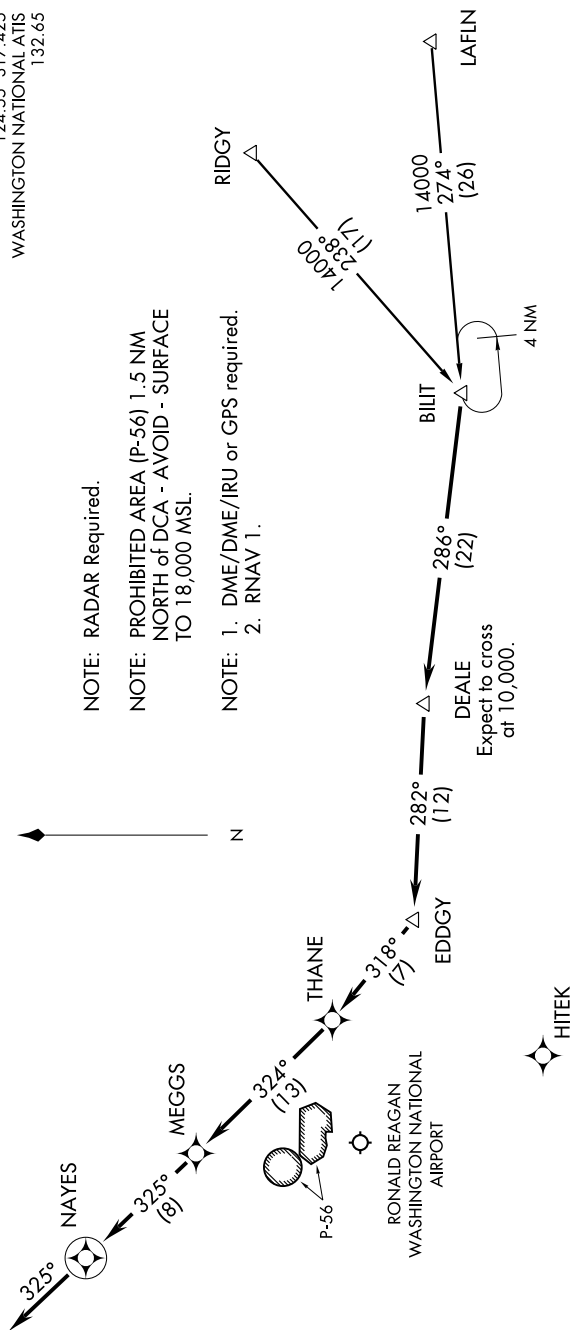
NE-3, 21 OCT 2010 to 18 NOV 2010

POTOMAC APP CON
124.55 317.425
WASHINGTON NATIONAL ATIS
132.65

NOTE: RADAR Required.

NOTE: PROHIBITED AREA (P-56) 1.5 NM
NORTH of DCA - AVOID - SURFACE
TO 18,000 MSL.

NOTE: 1. DME/DME/IRU or GPS required.
2. RNAV 1.



ARRIVAL ROUTE DESCRIPTION

LAFN TRANSITION (LAFN.BILT1):

RIDGY TRANSITION (RIDGY.BILIT1):

... From BILLIT WP via 286° track to DEALE WP, thence as depicted to NAYES WP, depart NAYES WP heading 325° for vectors to final approach course.

LANDING RWY 1: After EDDGY WP, expect radar vectors to final approach course.

LANDING RWY 19: Depart NAYES WP heading 325° for vectors to final approach course.

NOTE: Chart not to scale

BILIT ONE ARRIVAL (RNAV)

(BILIT.BILIT1) 09071

WASHINGTON, DC
WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL

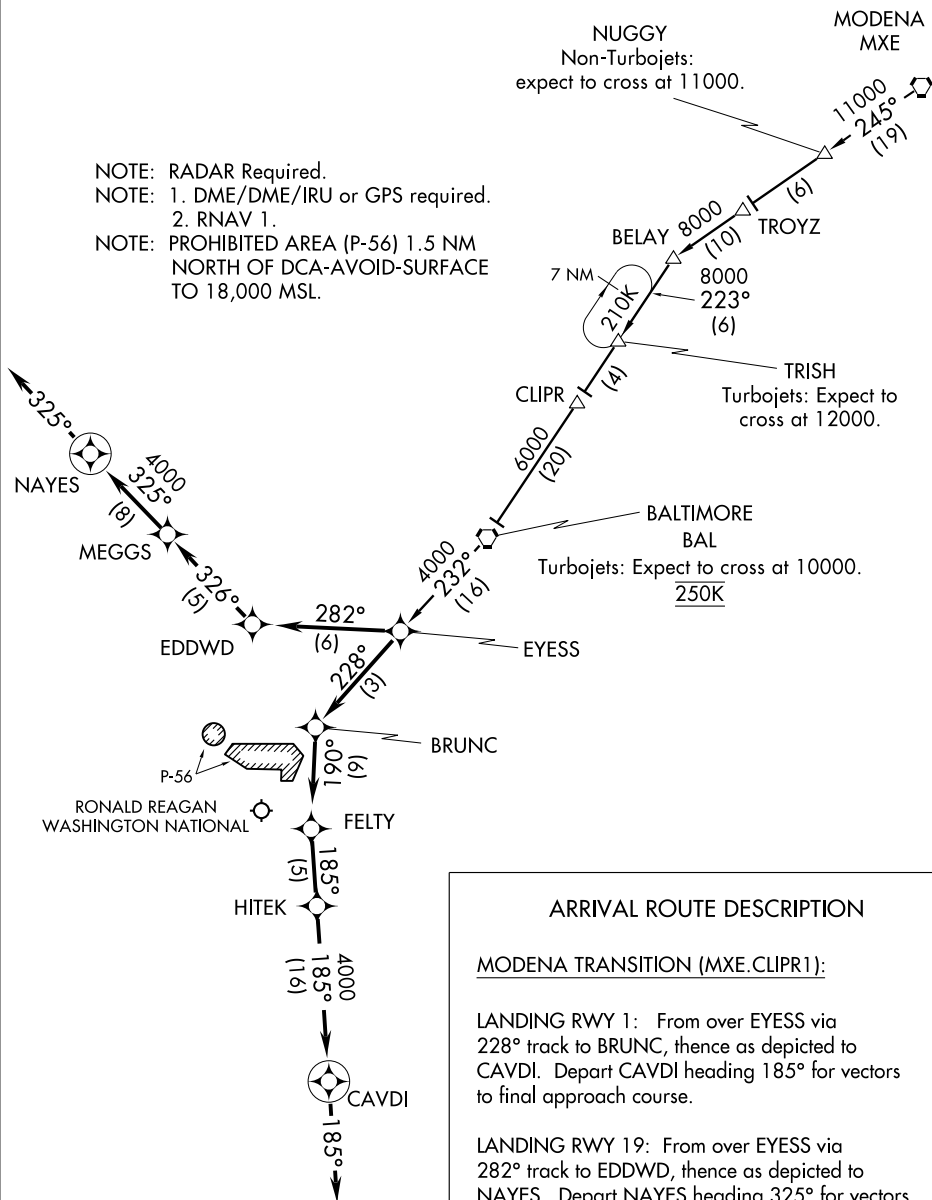
WASHINGTON, DC

(CLIPR.CLIPR1) 09071
CLIPR ONE ARRIVAL (RNAV)

ST-443 (FAA)
WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL
WASHINGTON, DC

POTOMAC APP CON
128.7 307.9
WASHINGTON NATIONAL ATIS
132.65

NOTE: RADAR Required.
NOTE: 1. DME/DME/IRU or GPS required.
2. RNAV 1.
NOTE: PROHIBITED AREA (P-56) 1.5 NM
NORTH OF DCA-AVOID-SURFACE
TO 18,000 MSL.



ARRIVAL ROUTE DESCRIPTION

MODENA TRANSITION (MXE.CLIPR1):

LANDING RWY 1: From over EYESS via 228° track to BRUNC, thence as depicted to CAVDI. Depart CAVDI heading 185° for vectors to final approach course.

LANDING RWY 19: From over EYESS via 282° track to EDDWD, thence as depicted to NAYES. Depart NAYES heading 325° for vectors to final approach course..

NOTE: Chart not to scale.

LOC/DME I-DCA
109.9
Chgn **36**

APP CR
007°

| | |
|----------|-------------|
| Rwy Idg | 6869 |
| TDZE | 15 |
| Apt Elev | 16 |

COPTER ILS or LOC RWY 1
WASHINGTON/RONALD REAGAN WASHINGTON NATIONAL (DCA)

A NA

Use I-DCA DME when on the LOC course.
Radio altimeter required.

ALSF-2



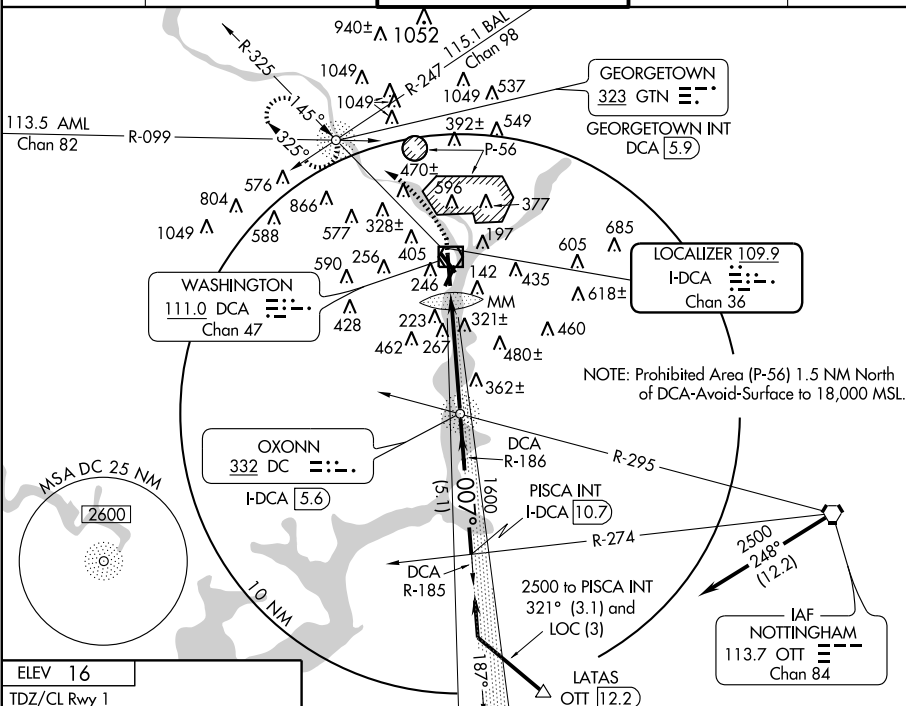
MISSED APPROACH: Climb to 500, then climbing left turn to 2100 via DCA R-325 to GTN NDB/Int/DCA 5.9 DME and hold

ATIS
132.65

POTOMAC APP CON
124.7 338.2

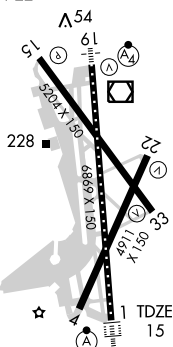
WASHINGTON TOWER
119.1 257.6

GND CON
121.7 257.6

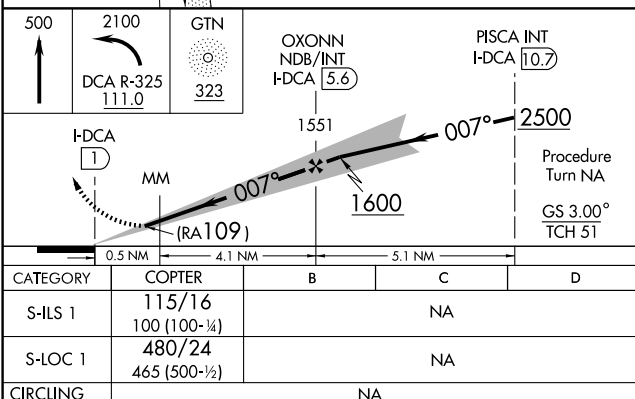
CLNC DEL
128.25

ELEV 16

TDZ/CL Rwy 1
REIL Rwys 4, 15, 22 and 33
HIRL Rwys 1-19 and 15-33
MIRL Rwy 4-22



007° 4.6 NM —
from FAF



COPTER ILS CATEGORY II - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED

WASHINGTON, DC
Orig-B 10098

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

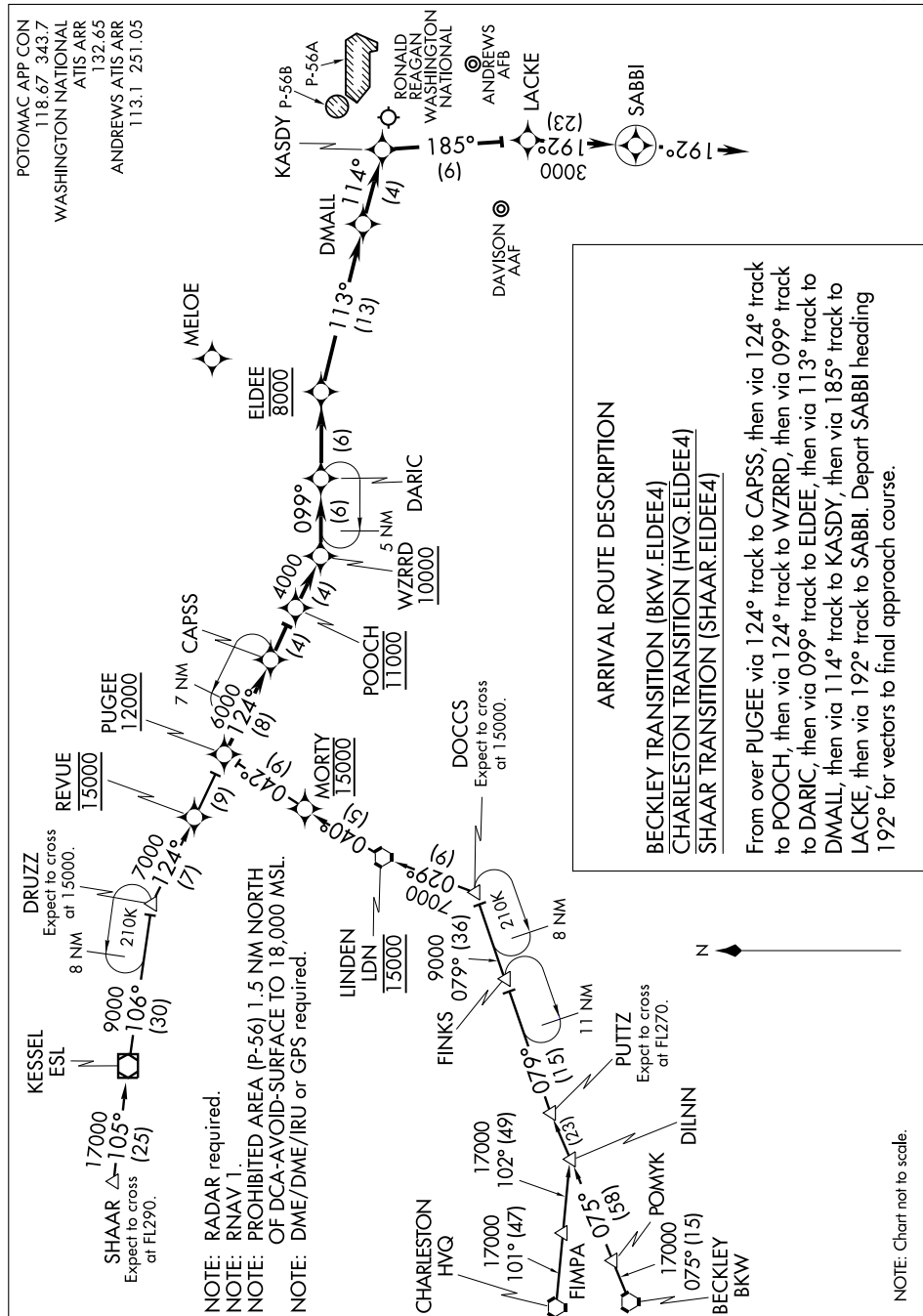
38°51'N-77°02'W

COPTER ILS or LOC RWY 1

NE-3. 21 OCT 2010 to 18 NOV 2010

ELDEE FOUR ARRIVAL (RNAV)

WASHINGTON, DC



ELDEE FOUR ARRIVAL (RNAV)

WASHINGTON, DC

LOC/DME I-DCA
109.9
 Chan **36**

APP CRS
007°

Rwy Idg **6869**
 TDZE **15**
 Apt Elev **16**

ILS RWY 1

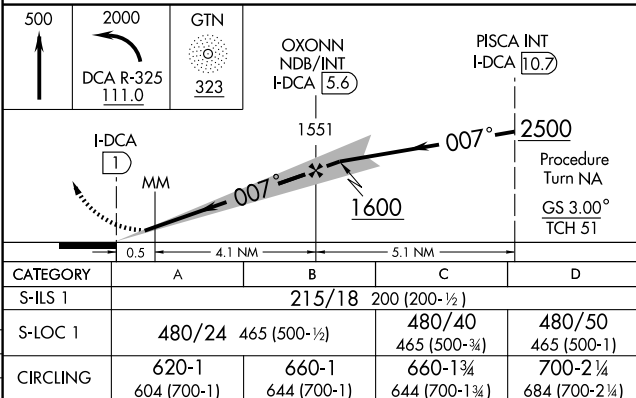
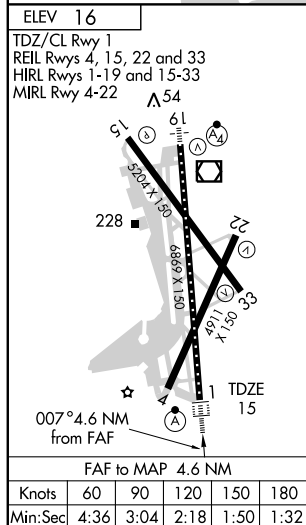
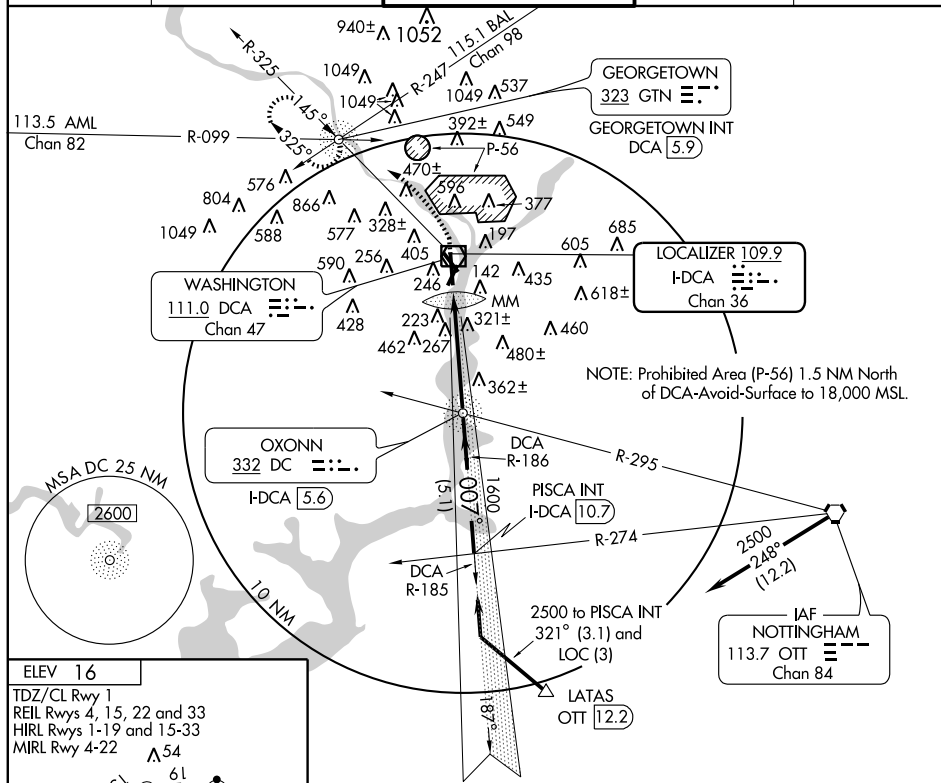
WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

⚠ Circling Cat C and D not authorized northeast of Rwy 15-33.
⚠ Use I-DCA DME when on the LOC course.

ALSF-2
A

MISSED APPROACH: Climb to 500, then climbing left turn to 2000 via DCA R-325 to GTN NDB/INT/DCA 5.9 DME and hold.

| ATIS | POTOMAC APP CON | WASHINGTON TOWER | GND CON | CLNC DEL |
|---------------|--------------------|--------------------|--------------------|---------------|
| 132.65 | 124.7 338.2 | 119.1 257.6 | 121.7 257.6 | 128.25 |



WASHINGTON, DC

Amdt 40 10098

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

38°51' N - 77°02' W

ILS RWY 1

LOC/DME I-DCA
109.9
 Chan **36**

APP CRS
007°

Rwy Idg **6869**
 TDZE **15**
 Apt Elev **16**

ILS RWY 1 (CAT II)
 WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

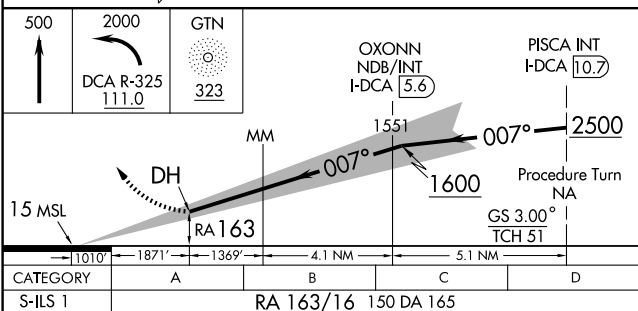
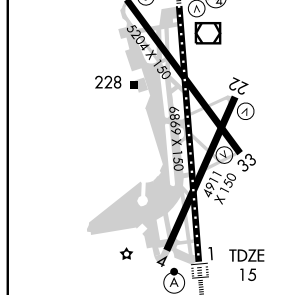
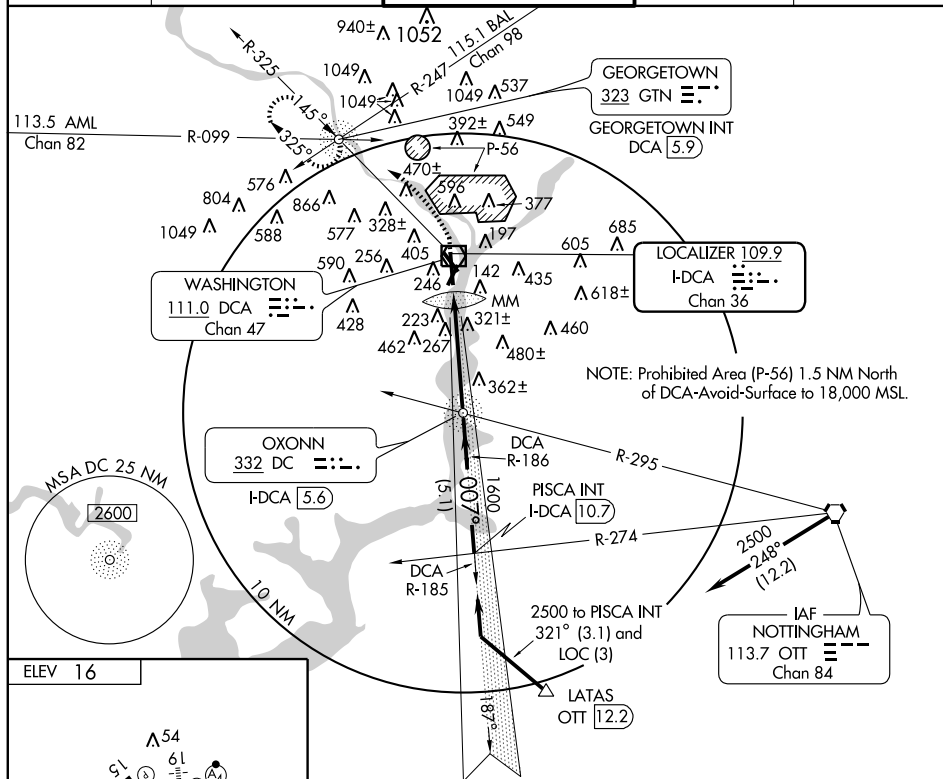


Use I-DCA DME when on the LOC course.



MISSED APPROACH: Climb to 500, then climbing left turn to 2000 via DCA R-325 to GTN NDB/Int/DCA 5.9 DME and hold.

| ATIS | POTOMAC APP CON | WASHINGTON TOWER | GND CON | CLNC DEL |
|---------------|--------------------|--------------------|--------------------|---------------|
| 132.65 | 124.7 338.2 | 119.1 257.6 | 121.7 257.6 | 128.25 |




**CATEGORY II ILS- SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED**

IRONS FOUR ARRIVAL

WASHINGTON, DC

POTOMAC APP CON
119.85 322.3 (DCA ARRIVALS ONLY)
128.35 270.275 (ADW ARRIVALS ONLY)
ANDREWS AFB ATIS
113.1 251.05
WASHINGTON NATIONAL ATIS
132.65

WASHINGTON
111.0 DCA 
Chan 47

RONALD REAGAN
WASHINGTON NATIONAL


P-56
COLLEGE PARK
ANDREWS AFB

FREEWAY

SAMMO
N38°44.66'
W77°03.66'

WASHINGTON EXECUTIVE/
HYDE FIELD

POTOMAC
AIRFIELD

NOTTINGHAM
113.7 OTT 
Chan 84

NOTE: Aircraft use DCA ATIS to
determine the direction
of landing prior to IRONS
INT. (DCA only).

NOTE: PROHIBITED AREA (P-56) 1.5 NM
NORTH OF DCA-AVOID-SURFACE
TO 18,000 MSL.


IRONS
N38°31.87'
W77°06.37'

OJAAY
N38°17.56'
W77°09.38'
**TURBOJET VERTICAL
NAVIGATION PLANNING
INFORMATION**
(DCA only)

Expect to cross at 10,000 feet
(and expect 250 kts in a North operation).

JIMBE
N38°07.68'
W77°11.44'

EPICS
N37°47.15'
W77°15.82'

HARCUM
108.8 HCM 
Chan 25

FLAT ROCK
113.3 FAK 
Chan 80

RICHMOND
114.1 RIC 
Chan 88

N37°30.14' - W77°19.22'

L-34-36, H-10-12

NOTE: Chart not to scale.

RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018
and DCA R-198 to IRONS INT. Thence. . .

. . . From over IRONS INT:

Ronald Reagan Washington National Airport (DCA only):

LANDING SOUTH: Then via DCA R-198 to SAMMO INT, heading for vectors to
the final approach course.

LANDING NORTH: Expect vectors to final approach course.

All other airports: Expect vectors.

IRONS FOUR ARRIVAL

WASHINGTON, DC

LOC/DME I-VVWH
108.5
 Chan **22**

APP CRS
145°

Rwy Idg **6869**
 TDZE **14**
 Apt Elev **16**

LDA/DME RWY 19
 WASHINGTON/RONALD REAGAN WASHINGTON NATIONAL (DCA)

▼ Inoperative table does not apply.
 ▲ Circling Cats C and D not authorized northeast of Rwy 15-33.

MALSF
 4 -

MISSED APPROACH: Climbing right turn to 1800
 via DCA R-185 to OXONN NDB/Int/DCA 5.6 DME
 and hold.

ATIS
132.65

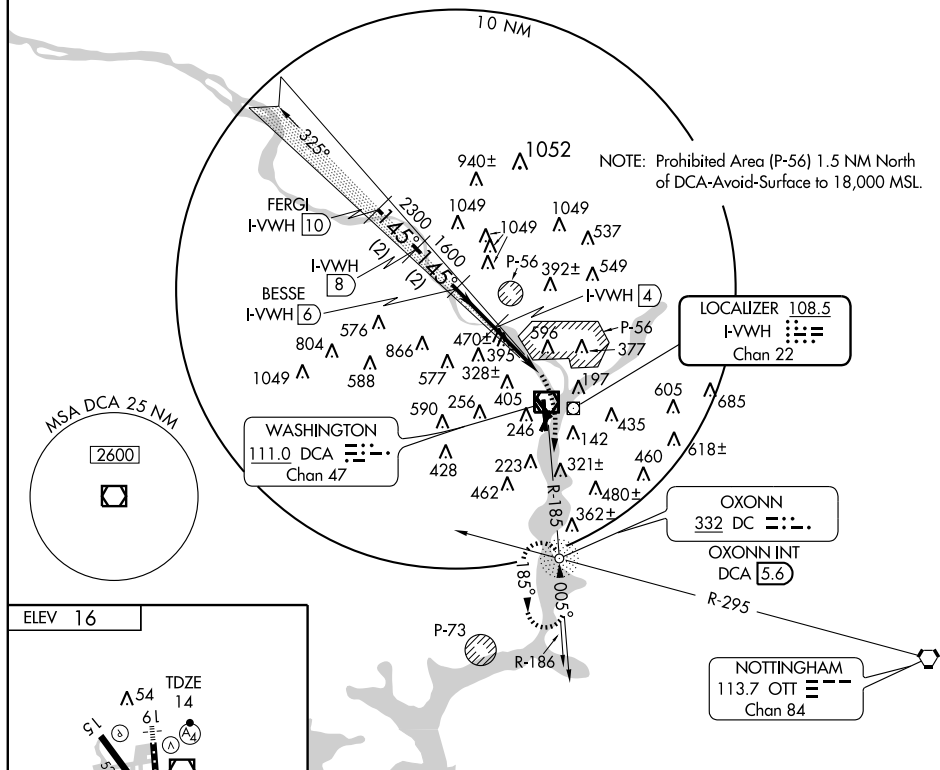
POTOMAC APP CON
124.7 338.2

WASHINGTON TOWER
119.1 257.6

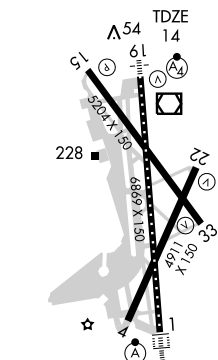
GND CON
121.7 257.6

CLNC DEL
128.25

RADAR REQUIRED



ELEV 16



TDZ/CL Rwy 1
 REIL Rws 4, 15, 22 and 33
 HIRL Rws 1-19 and 15-33
 MIRL Rwy 4-22

| | | | | |
|----------|-----------------------------|-------------------|---------------------|---------------------|
| | FERGI I-VVWH 10 | BESSE I-VVWH 6 | OXONN 332 DC | DC 332 |
| | I-VVWH 8 | I-VVWH 4 | I-VVWH 1.6 | |
| | *3000 | 2300 | 1600 | 1000 |
| | *2000 when directed by ATC. | | | |
| CATEGORY | A | B | C | D |
| S-LDA 19 | 720/60 706 (800-1¼) | 720-2 706 (800-2) | 720-2 706 (800-2¼) | 720-2¼ 706 (800-2¼) |
| CIRCLING | 720-1¼ 704 (800-1¼) | 720-2 704 (800-2) | 720-2¼ 704 (800-2¼) | 720-2¼ 704 (800-2¼) |

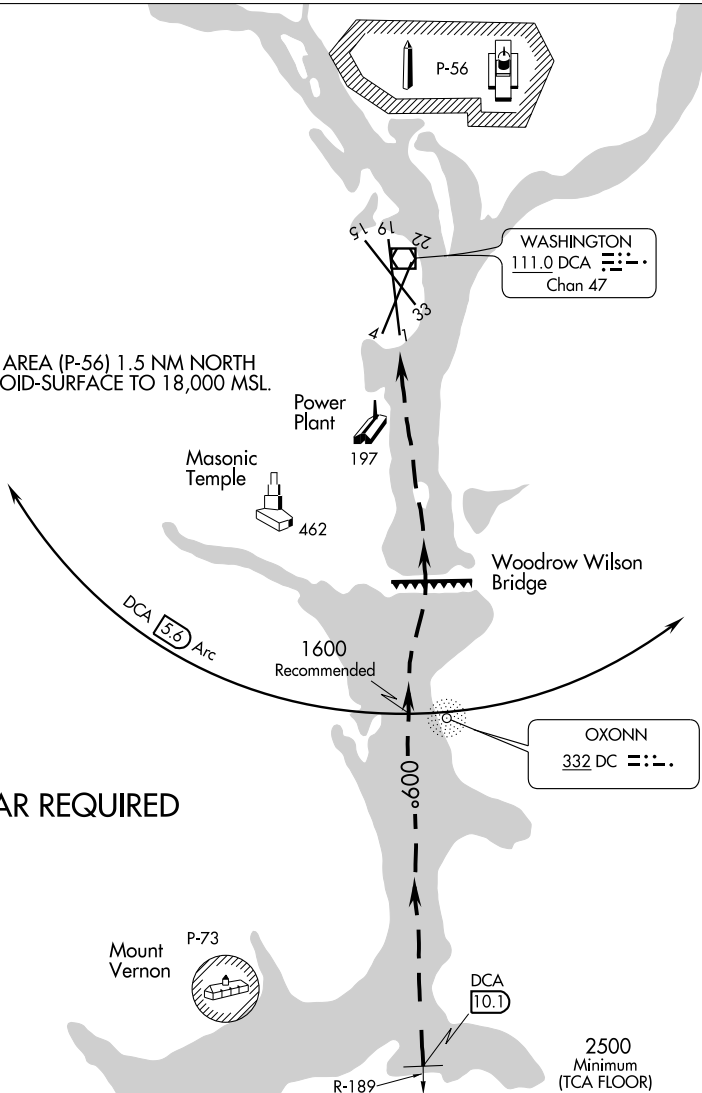
MOUNT VERNON VISUAL RUNWAY 1

AL-443 (FAA)

WASHINGTON, DC

ATIS 132.65
 POTOMAC APP CON
 124.7 338.2
 WASHINGTON TOWER
 119.1 257.6
 GRN CON
 121.7 257.6
 CLNC DEL
 128.25
 AWOS-3
 128.8

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH
 OF DCA-AVOID-SURFACE TO 18,000 MSL.



RADAR REQUIRED

Vertical Guidance
 Navaid and Angle:
 I-DCA 3°

Weather Minimums: 3000
 feet ceiling and 4 mile
 visibility.

| | | | | | | | | | | |
|------|---|---|---|---|---|---|---|---|----|----|
| 1 NM | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|------|---|---|---|---|---|---|---|---|----|----|

Aircraft may proceed via DCA VOR/DME R-189 (009° inbound) to DCA 5.6 DME, then follow the Potomac River to the airport.

MOUNT VERNON VISUAL RUNWAY 1

38°51'N-77°02'W

WASHINGTON, DC

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

(OJAAY.OJAAY1) 09183

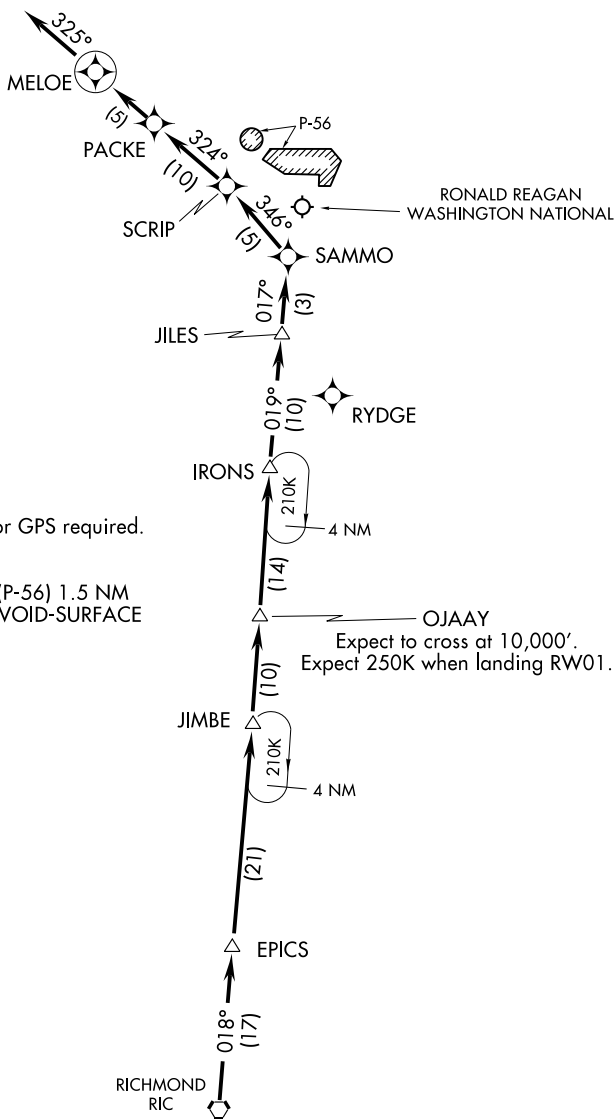
OJAAY ONE ARRIVAL (RNAV)

ST-443 (FAA)

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL

WASHINGTON, DC

POTOMAC APP CON
119.85 322.3
WASHINGTON NATIONAL ATIS
132.65



NOTE: RADAR Required.

NOTE: 1. DME/DME/IRU or GPS required.
2. RNAV 1.

NOTE: PROHIBITED AREA (P-56) 1.5 NM
NORTH OF DCA-AVOID-SURFACE
TO 18,000 MSL.

OJAAY
Expect to cross at 10,000'.
Expect 250K when landing RW01.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

From RIC VORTAC via 018° track to EPICS WP, thence as depicted to MELOE WP, depart MELOE WP heading 325° for vectors to final approach course.

LANDING RWY 1: After IRONS, expect radar vectors to final approach course.

LANDING RWY 19: Depart MELOE WP heading 325° for vectors to final approach

OJAAY ONE ARRIVAL (RNAV)

(OJAAY.OJAAY1) 09183

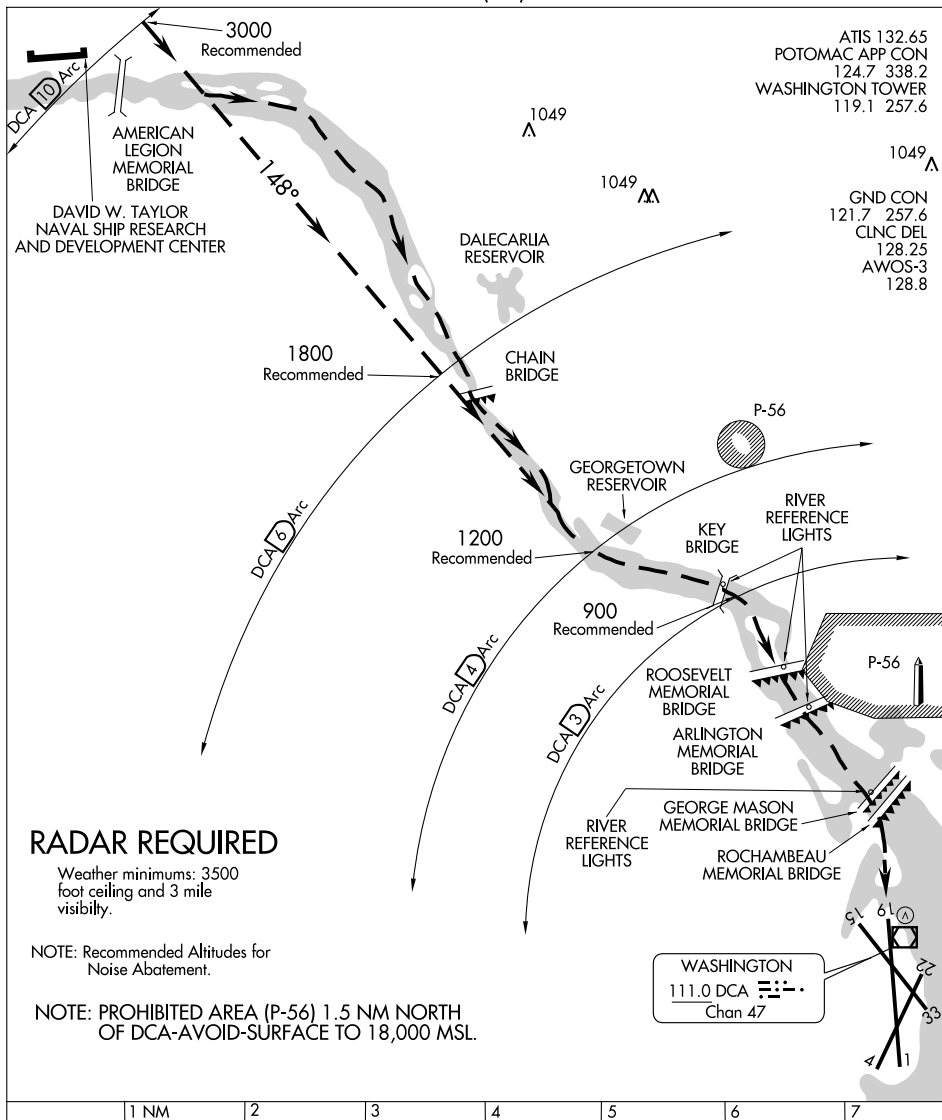
WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL

WASHINGTON, DC

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

RIVER VISUAL RWY 19

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)
AL-443 (FAA) WASHINGTON, DC

RADAR REQUIRED

Weather minimums: 3500
foot ceiling and 3 mile
visibility.

NOTE: Recommended Altitudes for
Noise Abatement.

NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH
OF DCA-AVOID-SURFACE TO 18,000 MSL.

RIVER VISUAL RWY 19

Aircraft may visually follow the river to the airport, or may proceed via the DCA VOR/DME R-328 (148° inbound) or via the Rosslyn LDA Rwy 19 Approach to abeam Georgetown Reservoir or the DCA 4 NM DME fix, then follow the river to the airport.

NOTE: Clearance for visual approach does not authorize penetration of P-56.

RIVER VISUAL RWY 19

38°51'N-77°02'W

WASHINGTON, DC

| | | |
|--|------------------------|---|
| WAAS CH 90123 W33A | APP CRS 332° | Rwy Idg 5204 TDZE 13 Apt Elev 15 |
|--|------------------------|---|

WASHINGTON/
RONALD REAG

RNAV (GPS) RWY 33

RONALD REAGAN WASHINGTON NATIONAL (DCA)



Circling NA for Cats C and D northeast of Rwy 15-33.
DME/DME RNP-0.3 NA.

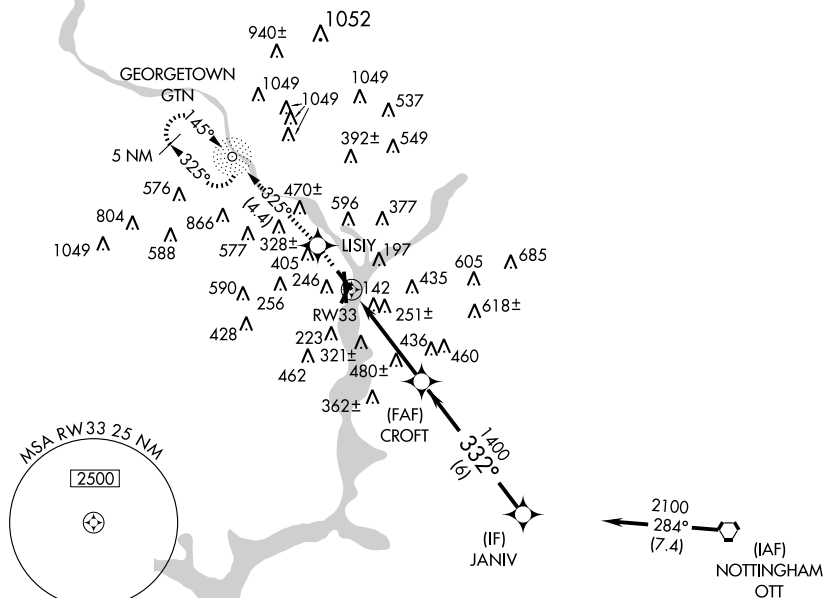
MISSED APPROACH: Climb to 2100 direct LISIY and via 325° track to GTN NDB and hold.

ATIS
132.65

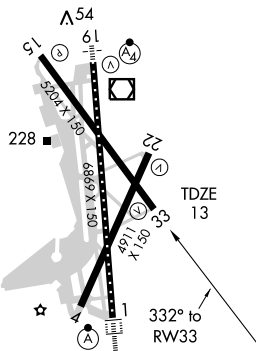
POTOMAC APP CON
124.7 338.2

WASHINGTON TOWER
119.1 257.6

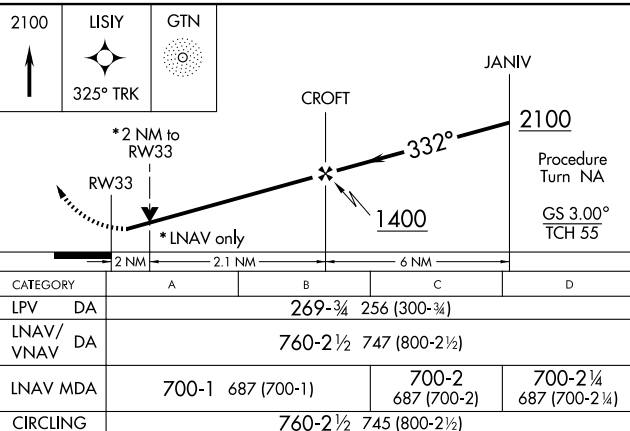
GND CON
121.7 257.6

CLNC DEL
128.25

ELEV 15



TDZ/CL Rwy 1
REIL Rwy 4, 15, 22 and 33
HIRL Rwy 1-19 and 15-33
MIRL Rwy 4-22



WASHINGTON, DC
Orig 09071

WASHINGTON / RONALD REAGAN WASHINGTON NATIONAL (DCA)
38°51' N - 77°02' W RNAV (GPS) RWY 33

RNAV (GPS) RWY 33

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3. 21 OCT 2010 to 18 NOV 2010

APP CRS **005°** Rwy Idg **6869**
 TDZE **14**
 Apt Elev **15**

RNAV (RNP) RWY 1

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

RF and GPS Required. For uncompensated Baro-VNAV systems, procedure NA below -5°C (23°F) or above 40°C (104°F). Missed approach requires RNP less than 1.0. For inoperative ALSF, increase RNP 0.30 visibility to RVR 6000.

ALSF-2

MISSED APPROACH: Climb to 2100 via left turn to FIVUD, and 325° track to HESLO, and 325° track to GTN NDB and hold.

| | | | | |
|-----------------------|---------------------------------------|--|-------------------------------|---------------------------|
| ATIS 132.65 | POTOMAC APP CON 124.7 338.2 | WASHINGTON TOWER 119.1 257.6 | GND CON 121.7 257.6 | CLNC DEL 128.25 |
|-----------------------|---------------------------------------|--|-------------------------------|---------------------------|

MISSED APCH FIX

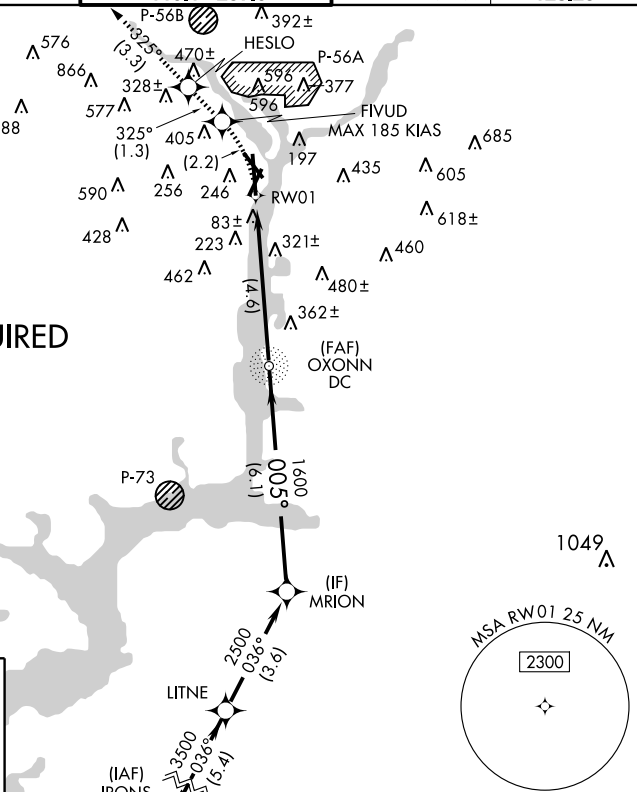
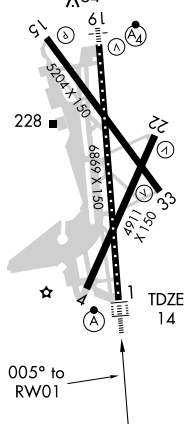


RADAR REQUIRED

NOTE: PROHIBITED AREA (P56)
 1.5 NM NORTH OF DCA - AVOID
 SURFACE TO 18,000 MSL.

ELEV 15

TDZ/CL Rwy 1
 REIL Rwy 4, 15, 22 and 33
 HIRL Rwy 1-19 and 15-33
 MIRL Rwy 4-22



| | | | | |
|--------------------|----------------------|-------------------|-----|---------------|
| 2100 | FIVUD 325° TRK | HESLO 325° TRK | GTN | MRION 2500 |
| OXONN 1600 | | | | |
| RW01 1600 | | | | |
| GP 3.09° TCH 60 | | | | |
| 4.6 NM 6.1 NM | | | | |
| CATEGORY | A | B | C | D |
| RNP 0.30 DA | 386/40 372 (400-3/4) | | | |

SPECIAL AIRCRAFT AND AIRCREW AUTHORIZATION REQUIRED.

| | | |
|-------------|----------|-------------|
| APP CRS | Rwy Idg | 6869 |
| 184° | TDZE | 13 |
| | Apt Elev | 15 |

RNAV (RNP) RWY 19

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

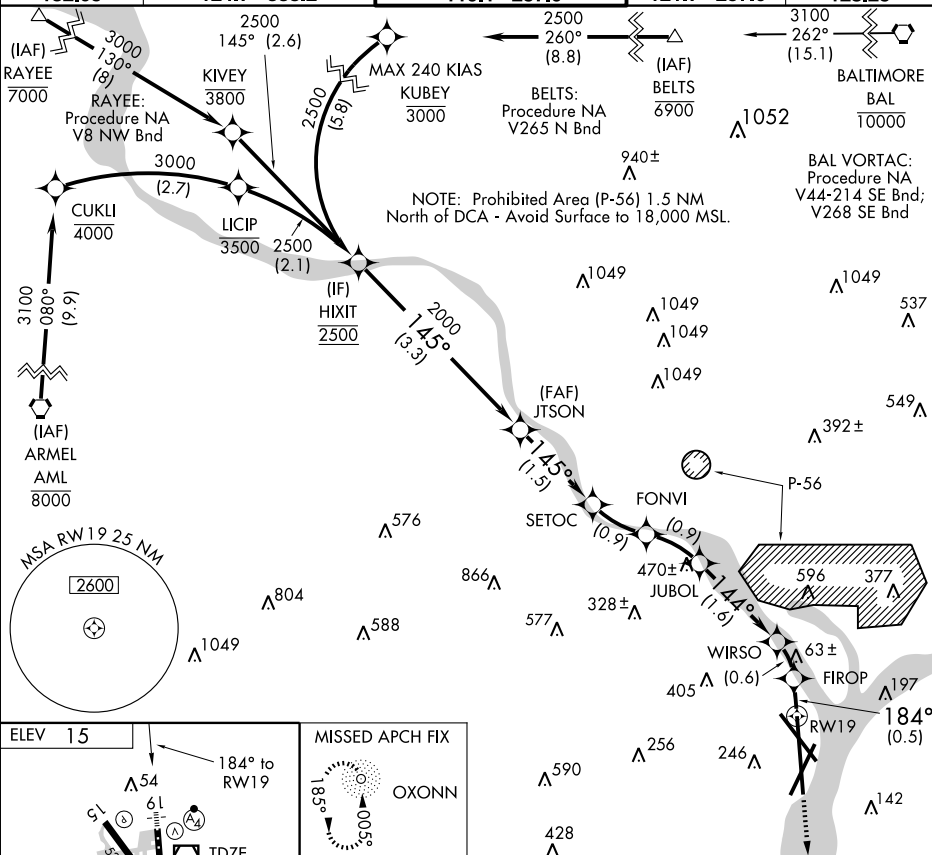
RF, GPS, and RADAR REQUIRED. For uncompensated Baro-VNAV systems, Procedure NA below -11°C (12°F) or above 49°C (120°F). Inoperative table does not apply. When East Side VGSI inop, Procedure NA.

MALSF

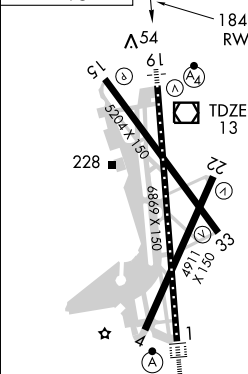
A_4 -

MISSED APPROACH: Climbing right turn to 1800 direct OXONN and hold.

| | | | | |
|----------------|--------------------------------|---------------------------------|------------------------|--------------------|
| ATIS 132.65 | POTOMAC APP CON 124.7 338.2 | WASHINGTON TOWER 119.1 257.6 | GND CON 121.7 257.6 | CLNC DEL 128.25 |
|----------------|--------------------------------|---------------------------------|------------------------|--------------------|

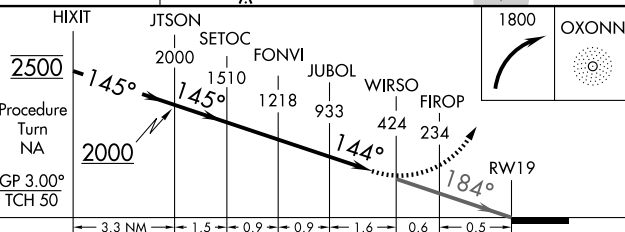


| | |
|------|----|
| ELEV | 15 |
|------|----|



TDZ/CL Rwy 1
REIL Rwys 4, 15, 22, and 33
HIRL Rwys 1-19 and 15-33
MIRL Rwy 22

MISSED APCH FIX



| CATEGORY | A | B | C | D |
|-------------|---------------------|---|---|---|
| RNP 0.11 DA | 475-1½ 462 (500-1½) | | | |

**SPECIAL AIRCRAFT & AIRCREW
AUTHORIZATION REQUIRED**

WASHINGTON, DC
Orig-B 10098

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)
38°51' N - 77°02' W **DNAY / (DNB) DNAY 10**

RNAV (RNP) RWY 19

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3 21 OCT 2010 to 18 NOV 2010

LOC/DME I-ASO
109.9
Chan **36**

APP CRS
147°

Rwy Idg **6869**
TDZE **14**
Apt Elev **16**

ROSSLYN LDA RWY 19
WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

- ▼ Glide slope provided by standard glide slope equipment.
Inoperative table does not apply.
- ▲ Circling Cats C and D not authorized northeast Rwy 15-33.

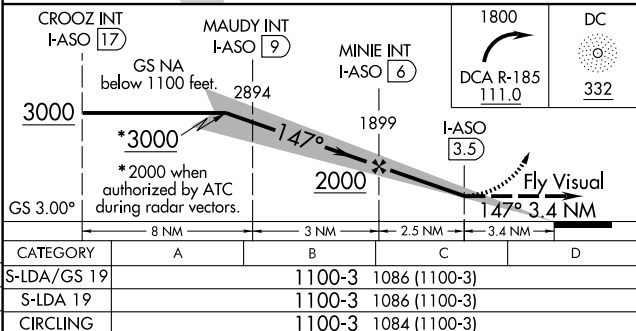
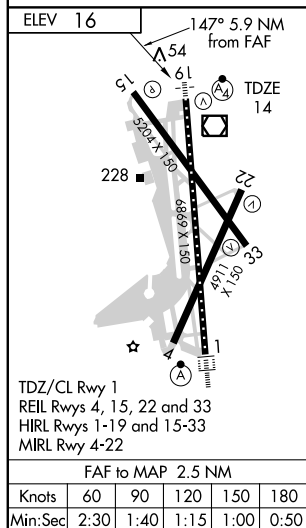
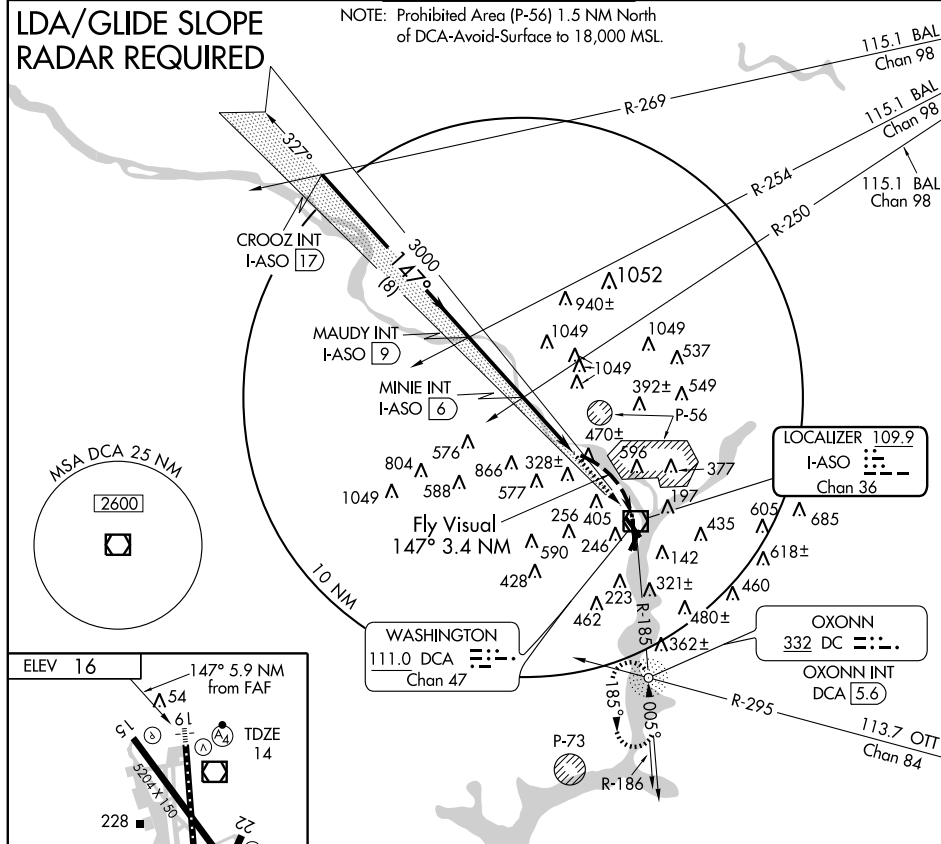


MISSED APPROACH: Climb to 1800 direct DCA
VOR/DME and R-185 to OXONN NDB/Int/DCA
5.6 DME and hold.

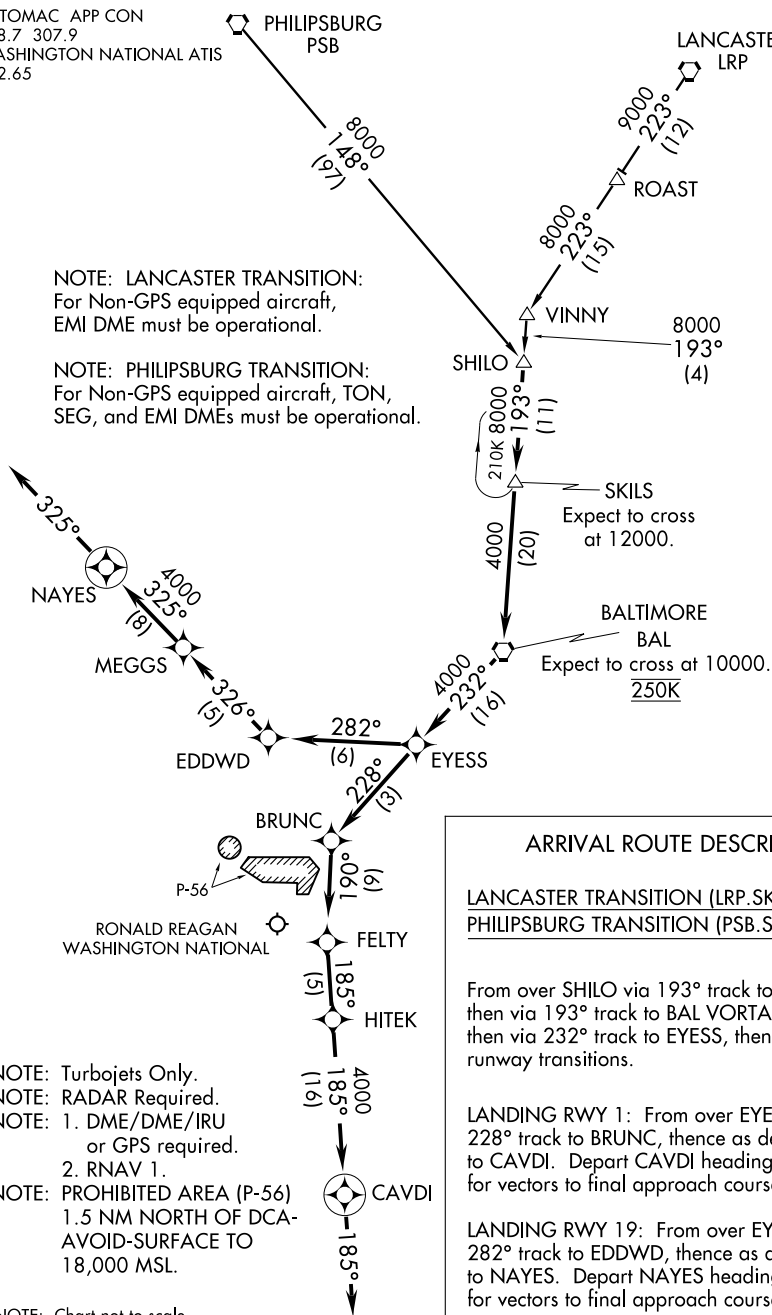
| ATIS | POTOMAC APP CON | WASHINGTON TOWER | GND CON | CLNC DEL |
|---------------|--------------------|--------------------|--------------------|---------------|
| 132.65 | 124.7 338.2 | 119.1 257.6 | 121.7 257.6 | 128.25 |

LDA/GLIDE SLOPE RADAR REQUIRED

NOTE: Prohibited Area (P-56) 1.5 NM North
of DCA-Avoid-Surface to 18,000 MSL.



SKILS ONE ARRIVAL (RNAV)

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL
WASHINGTON, DCPOTOMAC APP CON
128.7 307.9
WASHINGTON NATIONAL ATIS
132.65PHILIPSBURG
PSBLANCASTER
LRPNOTE: LANCASTER TRANSITION:
For Non-GPS equipped aircraft,
EMI DME must be operational.NOTE: PHILIPSBURG TRANSITION:
For Non-GPS equipped aircraft, TON,
SEG, and EMI DMEs must be operational.

ARRIVAL ROUTE DESCRIPTION

LANCASTER TRANSITION (LRP.SKILS1):
PHILIPSBURG TRANSITION (PSB.SKILS1):

From over SHILO via 193° track to SKILS, then via 193° track to BAL VORTAC, then via 232° track to EYESS, then via runway transitions.

LANDING RWY 1: From over EYESS via 228° track to BRUNC, thence as depicted to CAVDI. Depart CAVDI heading 185° for vectors to final approach course.

LANDING RWY 19: From over EYESS via 282° track to EDDWD, thence as depicted to NAYES. Depart NAYES heading 325° for vectors to final approach course.

NOTE: Chart not to scale.

SKILS ONE ARRIVAL (RNAV)

(SKILS.SKILS1) 09071

WASHINGTON, DC
WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

VOR/DME or GPS RWY 15
WASHINGTON/RONALD REAGAN WASHINGTON NATIONAL (DCA)

Circling Cat C and D not authorized
northeast of Rwy 15-33.

MISSED APPROACH: Climbing right turn to 1800 via DCA R-185 to OXONN NDB/Int/DCA 5.6 DME and hold.

ATIS
132.65

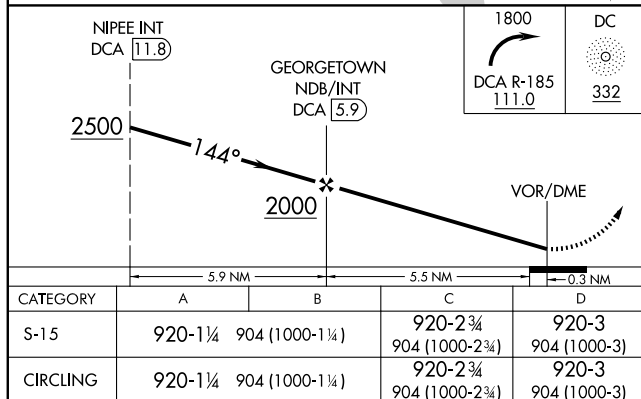
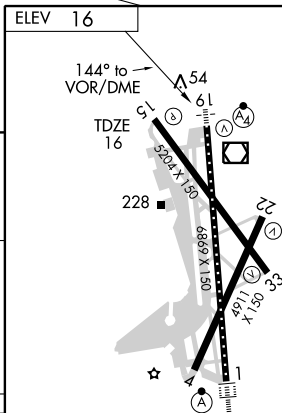
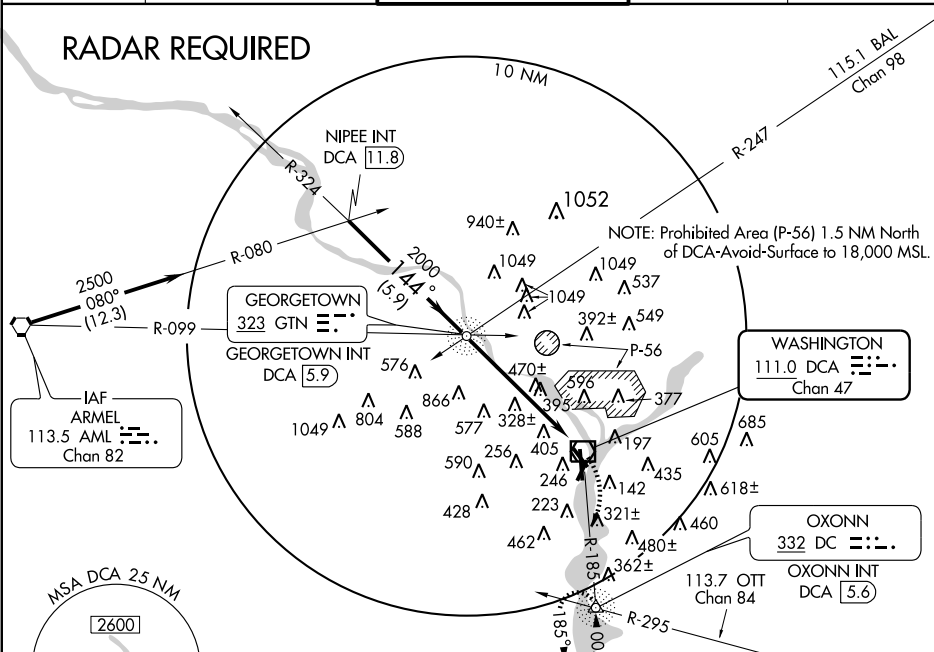
POTOMAC APP CON
124.7 338.2

WASHINGTON TOWER
119.1 257.6

GND CON
121.7 257.6

CLNC DEL
128.25

RADAR REQUIRED



WASHINGTON, DC
Amdt 1C 09015

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

38°51' N - 77°02' W

VOR/DME or GPS RWY 15

NE-3. 21 OCT 2010 to 18 NOV 2010

VOR/DME DCA
111.0
 Chan **47**

APP CRS
155°

Rwy Idg **6869**
 TDZE **13**
 Apt Elev **15**

VOR/DME or GPS RWY 19
 WASHINGTON/RONALD REAGAN WASHINGTON NATIONAL (DCA)

⚠ Inoperative table does not apply.
 ⚠ Circling Cats C and D not authorized northeast Rwy 15-33.

MALSF

MISSED APPROACH: Climbing right turn
 to 1800 via DCA R-185 to OXONN
 INT/NDB/DCA 5.6 DME and hold.

ATIS
132.65

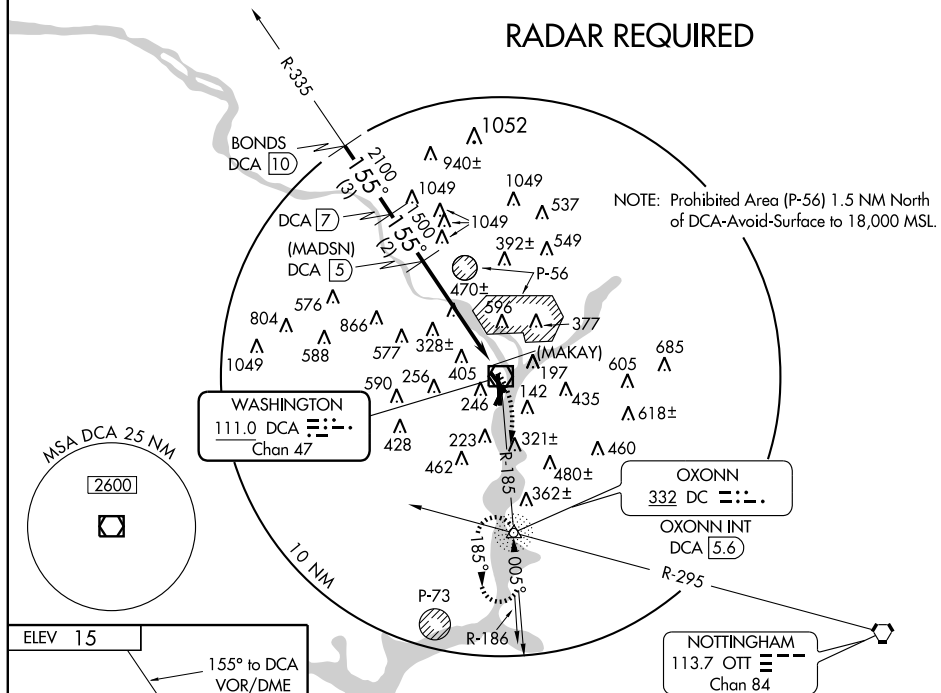
POTOMAC APP CON
124.7 338.2

WASHINGTON TOWER
119.1 257.6

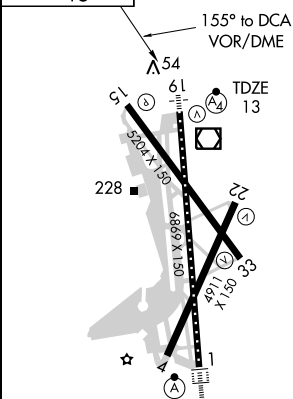
GND CON
121.7 257.6

CLNC DEL
128.25

RADAR REQUIRED



ELEV 15



TDZ/CL Rwy 1
 MRL Rwy 4-22
 REIL Rws 4, 15, 22 and 33
 HIRL Rws 1-19 and 15-33

WASHINGTON, DC
 Amdt 9B 09071

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)

38°51' N - 77°02' W

VOR/DME or GPS RWY 19

NE-3, 21 OCT 2010 to 18 NOV 2010

WASHINGTON, DC

AL-443 (FAA)

| | | | |
|---|------------------------|-----------------------------|---------------------------------------|
| VOR/DME DCA 111.0 Chan 47 | APP CRS 006° | Rwy Idg TDZE Apt Elev | 6869 14 15 |
|---|------------------------|-----------------------------|---------------------------------------|

WASHINGTON/
RONALD REAGAN WASHINGTON NATIONAL (DCA)

VOR RWY 1

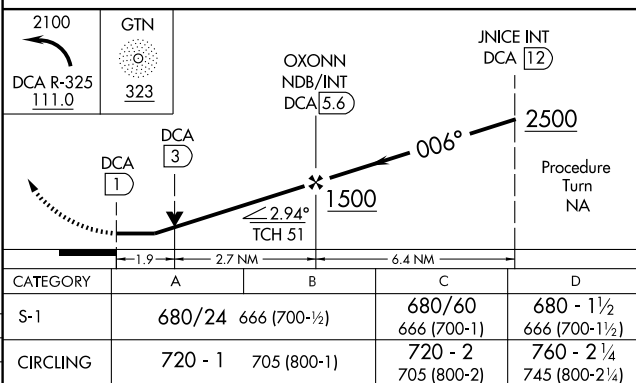
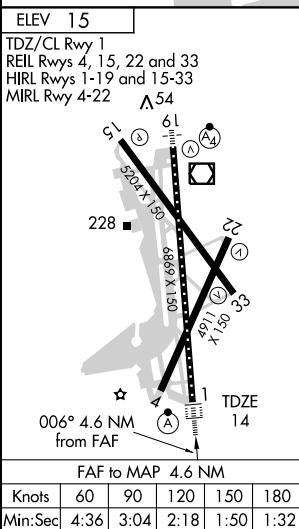
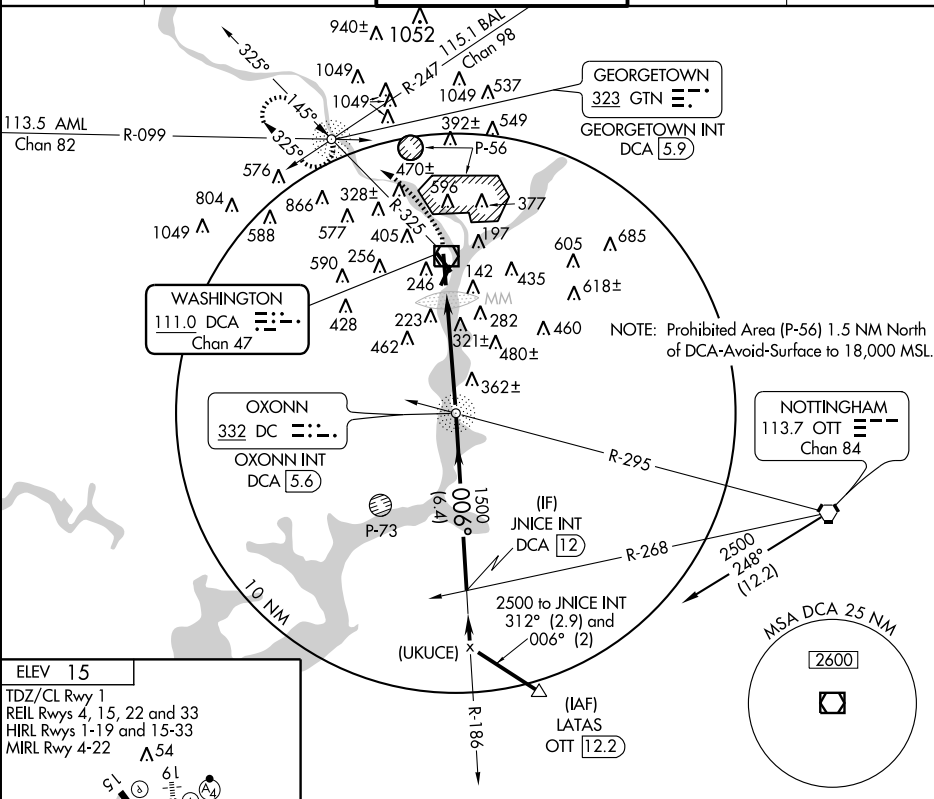


Circling NA NE of Rwy 1-5-33.



ALSIF-2
MISSED APPROACH: Climbing left turn to 2100 via
DCA VOR/DME R-325 to GTN NDB/INT/DCA 5.9 DME
and hold.

| | | | | |
|-----------------------|---------------------------------------|--|-------------------------------|---------------------------|
| ATIS 132.65 | POTOMAC APP CON 124.7 338.2 | WASHINGTON TOWER 119.1 257.6 | GND CON 121.7 257.6 | CLNC DEL 128.25 |
|-----------------------|---------------------------------------|--|-------------------------------|---------------------------|



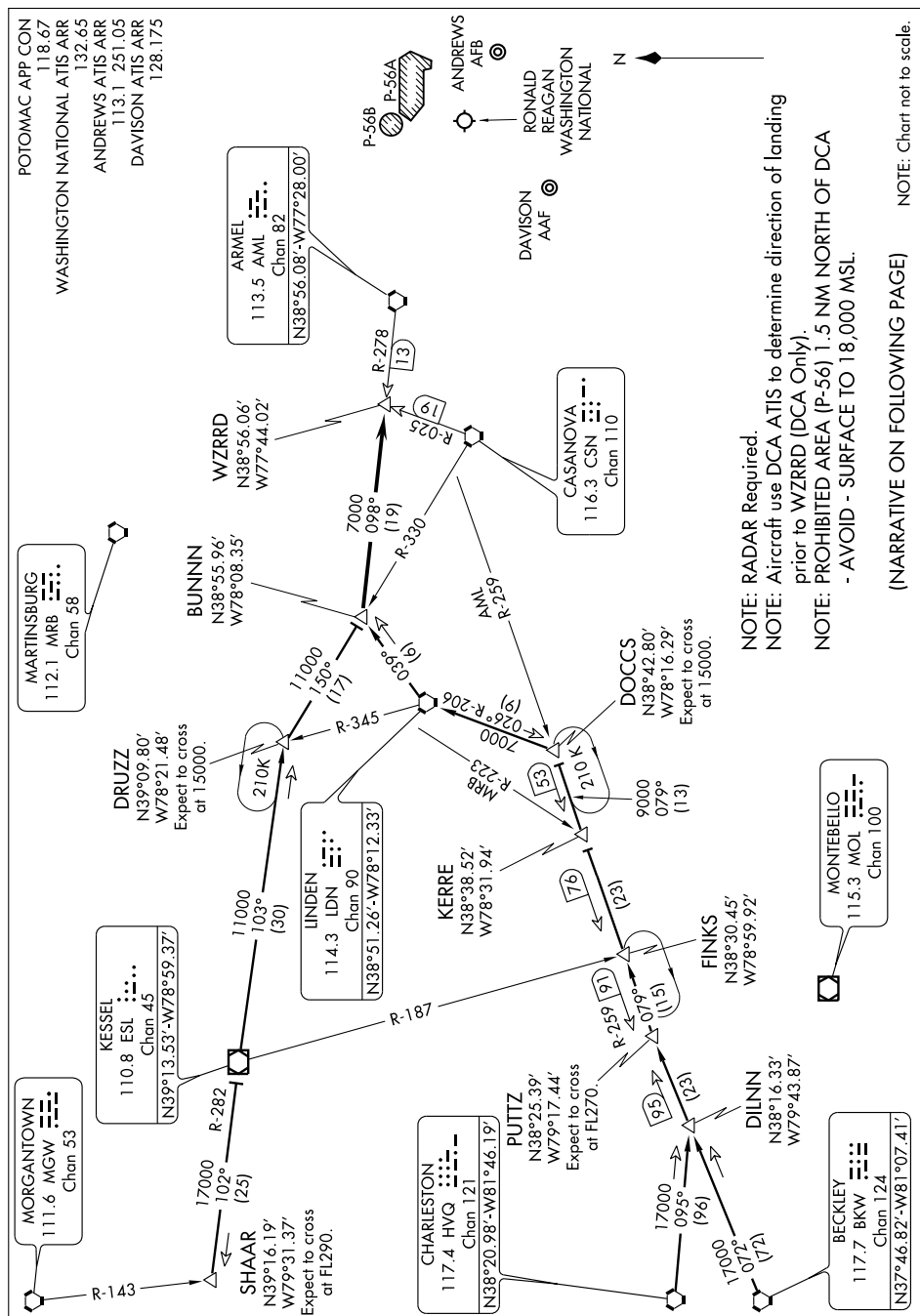
WASHINGTON, DC
Amdt 13 10098

WASHINGTON/ RONALD REAGAN WASHINGTON NATIONAL (DCA)
38°51' N - 77°02' W
VOR RWY 1

NE-3, 21 OCT 2010 to 18 NOV 2010

WZRRD TWO ARRIVAL

WASHINGTON, DC



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NE-3. 21 OCT 2010 to 18 NOV 2010

WZRRD TWO ARRIVAL

WASHINGTON, DC

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.WZRRD2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence

CHARLESTON TRANSITION (HVQ.WZRRD2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence

SHAAR TRANSITION (SHAAR.WZRRD2): From over SHAAR INT via ESL R-282 to ESL VOR/DME, then via R-103 to DRUZZ INT, then via CSN R-330 to BUNNN, thence

. . . . from over BUNNN INT via AML R-278 to WZRRD INT. Expect vectors to final approach course after WZRRD INT.

NE-3, 21 OCT 2010 to 18 NOV 2010

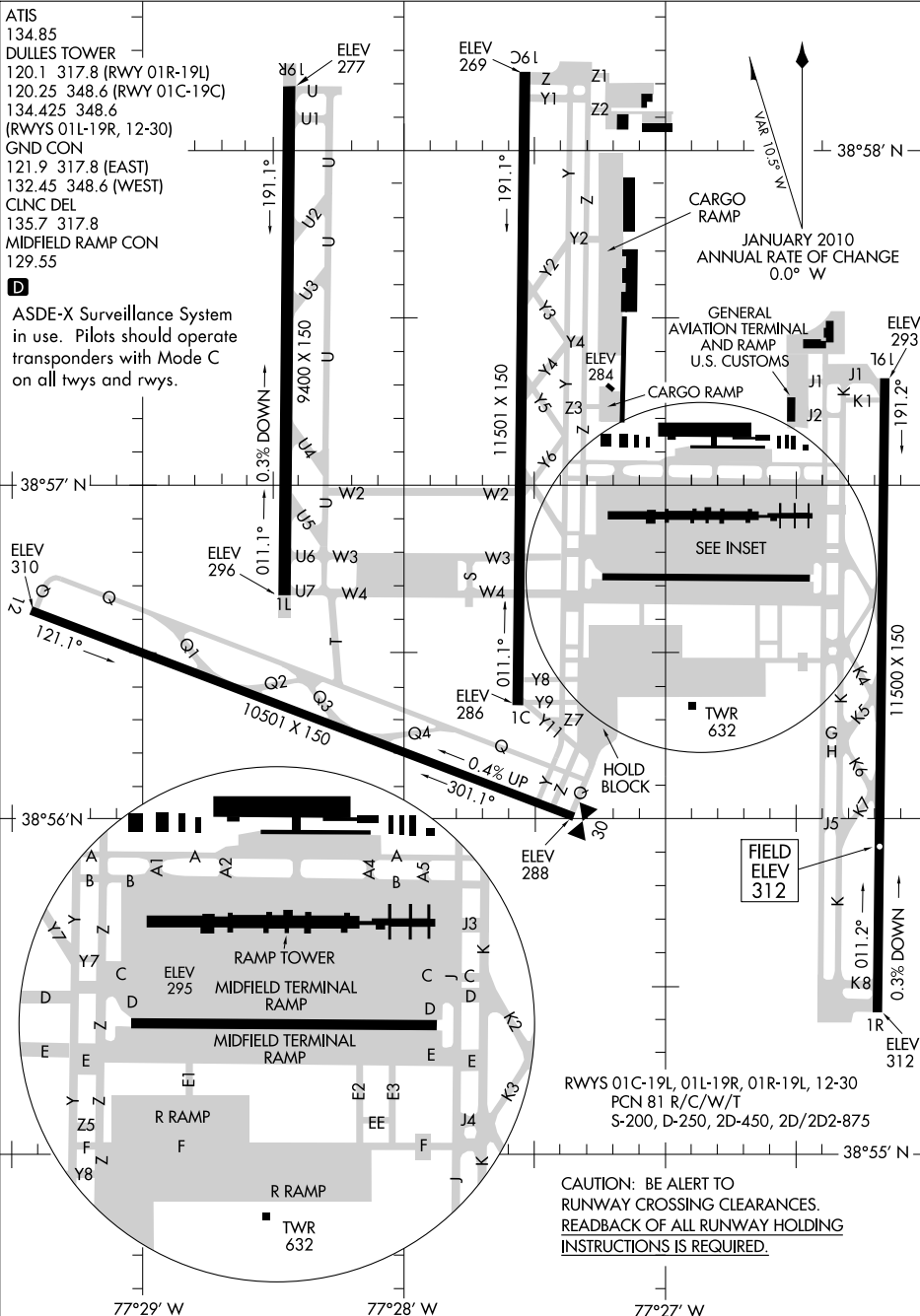
NE-3, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

AL-5100 (FAA)

WASHINGTON DULLES INTL (IAD)

WASHINGTON, DC



NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

WASHINGTON, DC
WASHINGTON DULLES INTL (IAD)

WASHINGTON DULLES INTL (IAD) 20 W UTC-5(-4DT) N38°56.85' W77°27.60'

WASHINGTON

312 B S4 FUEL 100, JET A OX 1, 2, 3 LRA Class I, ARFF Index E

COPTER

NOTAM FILE IAD

H-10H, 121, L-29E, 34E, 361, A

RWY 01C-19C: H11501X150 (CONC-GRVD) S-200, D-250, 2D-450, 2D/2D2-875

IAP, AD

PCN 81 R/C/W/T HIRL CL

RWY 01C: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 70'.

RWY 19C: ALSF2. TDZL. PAPI(P4R)—GA 3.0° TCH 72'.

RWY 01R-19L: H11500X150 (CONC-GRVD) S-200, D-250, 2D-450,

2D/2D2-875 PCN 81 R/C/W/T HIRL CL

RWY 01R: ALSF2. TDZL. PAPI(P4R)—GA 3.0° TCH 72'. Building.

RWY 19L: MALSR. PAPI(P4L)—GA 3.0° TCH 75'. Pole.

0.3% up.

RWY 01L-19R: H9400X150 (CONC-GRVD) S-200, D-250, 2D-450,

2D/2D2-875 PCN 81 R/C/W/T HIRL CL

RWY 01L: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 70'. 0.3% down.

RWY 19R: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 70'.

RWY 12-30: H10501X150 (CONC-GRVD) S-200, D-250, 2D-450,

2D/2D2-875 PCN 81 R/C/W/T HIRL CL

RWY 12: MALSR. TDZL. PAPI(P4R).

RWY 30: REIL. PAPI(P4L)—GA 3.0° TCH 75'. 0.4% up.

RUNWAY DECLARED DISTANCE INFORMATION:

RWY 01L: TORA-9400 TODA-9400 ASDA-9400 LDA-9400

RWY 01C: TORA-11501 TODA-11501 ASDA-11501 LDA-11501

RWY 01R: TORA-11500 TODA-11500 ASDA-11500 LDA-11500

RWY 12: TORA-10501 TODA-10501 ASDA-10501 LDA-10501

RWY 19L: TORA-11500 TODA-11500 ASDA-11500 LDA-11500

RWY 19C: TORA-11501 TODA-11501 ASDA-11501 LDA-11501

RWY 19R: TORA-9400 TODA-9400 ASDA-9400 LDA-9400

RWY 30: TORA-10501 TODA-10501 ASDA-10501 LDA-10501

AIRPORT REMARKS: Attended continuously. Deer and large flocks of birds on and in/ovf arpt. PAEW adjacent all rwy and twys indef. Flight training between 0300-1200Z prohibited. Rwy 12 and Rwy 30 touchdown, rollout runway visual range avbl. Rwy 01C, Rwy 19C, Rwy 01R and Rwy 19L touchdown, midfield, and rollout, runway visual range avbl. Rwy 01L and Rwy 19R touchdown, midfield, and rollout visual range avbl. Itinerant acft ctc fixed base operator on 122.95 for services. ASDE-X Surveillance System in use. Pilots should operate transponders with Mode C on all twys and rwy. Air carrier push backs and power from all apron positions require clearance from MWAA Ramp tower. All acft with wingspan exceeding 118' are restricted from using Taxiway A between Taxiway A1 and A5. Twy E1 rstd to acft with a wingspan less than 79'. Twy J-3 clsd west of Twy J. Runup blocks for Rwy 30 designated as non-movement area. Numerous flagged and lighted cranes operating in midfield area.

Taxiway C active; pushback clncs on N side of midfield terminal are onto Taxiway D only unless otherwise authorized. All 180° turns out of apron positions shall be made using minimum power. During periods of acft saturation long term parking may not be avbl. Svc for fuel and go only will be avbl. Ldg fee. Flight Notification Service (ADCUS) available. NOTE: See Special Notices—Continuous Power Facilities.

WEATHER DATA SOURCES: ASOS (703) 661-2990. LLWAS. TDWR.

COMMUNICATIONS: D-ATIS 134.85 (703) 661-6347. UNICOM 122.95

ARMEL RCO 113.5T 122.1R (LEESBURG RADIO)

(R) POTOMAC APP CON 126.1 (331°-090°) 124.65 (091°-240°) 120.45 (241°-330°)

TOWER 120.1 (Rwy 01R-19L) 120.25 (Rwy 01C-19C) 134.425 (Rwy 01L-19R, Rwy 12-30)

MIDFIELD RAMP CON 129.55

GND CON 121.9 (East) 132.45 (West) **CLNC DEL** 135.7

(R) POTOMAC DEP CON 126.65 (121°-299°) 125.05 (300°-120°)

AIRSPACE: CLASS B See VFR Terminal Area Chart.

RADIO AIDS TO NAVIGATION: NOTAM FILE IAD.

ARMEL (L) VORTAC 113.5 AML Chan 82 N38°56.08' W77°28.00' at fld. 297/08W

TILLE NDB (LOM) 346 IA N38°50.84' W77°26.27' 360° 6.1 NM to fld.

ILS 111.3 I-DLX Rwy 19C. Class IIIE.

ILS 111.3 I-OSZ Rwy 01C. Class IE.

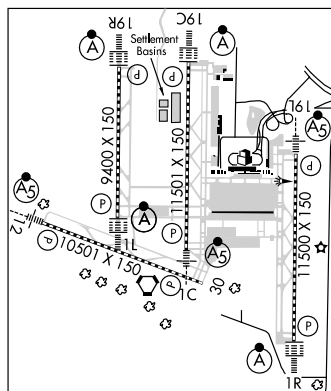
ILS/DME 110.1 I-SGC Chan 38 Rwy 19L. Class IE.

ILS/DME 110.1 I-IAD Chan 38 Rwy 01R. Class IIIE. LOM TILLE NDB.

ILS/DME 110.75 I-ISU Chan 44Y Rwy 19R. Class IIIE.

ILS/DME 110.75 I-OIU Chan 44Y Rwy 01L. Class IIIE.

ILS 109.3 I-AJU Rwy 12. Class IE. Glideslope unmonitored.



(COATT.BARIN1) 09183

ST-5100 (FAA)

WASHINGTON DULLES INTL
WASHINGTON, DC

BARIN ONE ARRIVAL (RNAV)

POTOMAC APP CON
124.65 306.925
DULLES ATIS
134.85

MARTINSBURG
MRB

LANDING RWYS 19L/C/R: Depart MIXNN
heading 010°, expect radar vectors to
final approach course.

TRING
4000

WASHINGTON DULLES INTL

MIXNN
4000

NOTE: Maintain last ATC assigned
altitude until cleared to "Descend
via the Barin One Arrival."

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.

NOTE: Radar required.

012°
(13)

012°
(15)

012°
(11)

012°
(11)

012°
(15)

012°
(11)

012°
(15)

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012°
(15)

012°
(15)

012°
(15)

012°
(15)

LANDING RWYS 1L/C/R or 30: After
BARIN, expect radar vectors to final
approach course.

FALKO

Non-turbojets expect to cross at 8,000'.
Turbojets expect to cross at 10,000
and 250 KIAS.

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

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4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

4 NM 230K BROOKE BRV

ARRIVAL ROUTE DESCRIPTION

FLAT ROCK TRANSITION (FAK.BARIN1)
RICHMOND TRANSITION (RIC.BARIN1)

... From COATT via 035° track to OGATE,
thence as depicted to MIXNN, cross MIXNN
at 4,000', depart MIXNN heading 010°.
Expect radar vectors to final
approach course.

NOTE: Chart not to scale.

BARIN ONE ARRIVAL (RNAV)

(COATT.BARIN1) 09183

WASHINGTON, DC
WASHINGTON DULLES INTL

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

(CPTAL7.IAD) 10098
CAPITAL SEVEN DEPARTURE

SL-5100 (FAA)

WASHINGTON DULLES INTL (IAD)
WASHINGTON, DC

ATIS 134.85
CLNC DEL 135.7 317.8
GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)
DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwys 1L/19R, 12/30)

JERES
△ N39°38.57'
W77°27.30'
L-29-34, H-10-12

△ BUFFER
N39°27.56'
W77°35.90'
L-29-34, H-10-12

WESTMINSTER
117.9 EMI
Chan 126
N39°29.70' - W76°58.71'
L-29-34-36, H-10-12

POTOMAC DEP CON
NORTH
125.05 350.2

BALTIMORE
115.1 BAL
Chan 98
N39°10.26' - W76°39.68'
L-29-34-36, H-10-12

SWANN
N39°09.09'
W76°13.73'
L-34-36, H-10-12

△ WOOLY
N39°20.32'
W77°02.19'
L-29-34-36

ANNGE
N39°02.17'
W77°11.36'
L-29-34-36

MARTINSBURG
112.1 MRB
Chan 58
N39°23.13' - W77°50.90'
L-29, H-10-12

PALEO
N39°01.68'
W76°22.36'
L-29-34-36, H-10-12

ARMEL
113.5 AML
Chan 82
N38°56.08'
W77°28.00'
L-29-34-36, H-10-12

BLUES △
N38°47.75'
W77°54.45'
L-29-34, H-10-12

FLUKY △
N38°30.39'
W77°43.75'
L-29-34-36, H-10-12

LINDEN
114.3 LDN
Chan 90
N38°51.26' - W78°12.33'
L-29-34, H-10-12

HAFNR
N38°23.84'
W77°33.98'
L-29-34-36, H-10-12

WASHINGTON
111.0 DCA
Chan 47
N38°51.57' - W77°02.19'
L-29-34-36, H-10-12

NOTTINGHAM
113.7 OTT
Chan 84
N38°42.35' - W76°44.68'
L-29-34-36, H-10-12

DAILY
N38°33.63'
W76°43.52'
L-29-34-36
H-10-12

SMYRNA
111.4 ENO
Chan 51
N39°13.90' - W75°30.96'
L-34, H-10-12

GORDONSVILLE
115.6 GVE
Chan 103
N38°00.81' - W78°09.18'
L-34-36, H-10-12

POTOMAC DEP CON
SOUTH
126.65 350.2

TAKE-OFF MINIMUMS

Rwys 1C, 1R, 1L, 12, 19C, 19R, 19L, 30: STANDARD.

NOTE: RADAR Required.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1C, 1L, 1R: Climb heading 011° or as assigned, Thence. . . .
TAKE-OFF RUNWAY 12: Climb heading 121° or as assigned, Thence. . . .
TAKE-OFF RUNWAYS 19C, 19L, 19R: Climb heading 191° or as assigned, Thence. . . .
TAKE-OFF RUNWAY 30: Climb heading 301° or as assigned, Thence. . . .

. . . .Expect radar vectors to filed/assigned route or depicted fix. Maintain 3000, expect clearance to filed altitude/flight level 10 minutes after departure.

SPECIAL INSTRUCTIONS: For appropriate departure control frequency, see graphic. Use frequency depicted within sector where your first Navaid/Fix/Route is located, or as assigned.

TAKE-OFF OBSTACLES

- Rwy 1C: Tree 2814’ from DER, 1030’ left of centerline, 86’ AGL/345’ MSL.
- Rwy 1R: Post 12’ from DER, 223’ right of centerline, 8’ AGL/294’ MSL.
- Rwy 1L: Tower 1918’ from DER, 680’ left of centerline, 56’ AGL/330’ MSL
- Rwy 12: Tree 520’ from DER, 604’ left of centerline, 28’ AGL/307’ MSL.
- Rwy 30: Trees beginning 161’ from DER, 520’ left of centerline, up to 57’ AGL/396’ MSL.
Trees beginning 532’ from DER, 600’ right of centerline, up to 64’ AGL/383’ MSL.

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

COATT FOUR ARRIVAL

WASHINGTON, DC

POTOMAC APP CON
NORTH 125.8 306.925
SOUTH 124.65 306.925
DULLES ATIS 134.85

LEESBURG EXECUTIVE

WASHINGTON
DULLES
INTL

MANASSAS RGNL/
HARRY P. DAVIS FIELD

ARMEL
113.5 AML
Chan 82
N38°56.08' - W77°28.00'

CASANOVA
116.3 CSN
Chan 110

R-104

BARIN
N38°35.18' - W77°21.83'
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect to cross at 5,000'.

BROOKE
114.5 BRV
Chan 92
N38°20.18' - W77°21.17'

2400
007
(15)

USE FAK R-031 TO BRV,
BRV R-214 UNUSEABLE.

4 NM

210K

43

FALKO
N38°11.11' - W77°26.56'
TURBOJET VERTICAL NAVIGATION
PLANNING INFORMATION
Expect to cross at 10,000'
at 250 KT.

OGATE
N38°03.48'
W77°31.07'

COATT
N37°57.49'
W77°34.61'

NABBS
N37°52.60'
W77°37.49'

DEAND
N37°48.42'
W77°29.48'

FLAT ROCK
113.3 FAK
Chan 80
N37°31.71' - W77°49.69'
L-36, H-10-12

RICHMOND
114.1 RIC
Chan 88
N37°30.14' - W77°19.22'
L-34-36, H-10-12

NOTE: Chart not to scale.

FLAT ROCK TRANSITION (FAK.COATT4): From over FAK VORTAC via FAK R-031 to COATT INT. Thence

RICHMOND TRANSITION (RIC.COATT4): From over RIC VORTAC via RIC R-345 to COATT INT. Thence

. . . . From over COATT INT via FAK R-031 to BRV VORTAC, then from over BRV VORTAC via BRV R-007 to BARIN INT. Expect radar vectors to final approach course after BARIN INT.

COATT FOUR ARRIVAL

WASHINGTON, DC

| | | |
|---------------------------|------------------------|--|
| LOC I-AJU 109.3 | APP CRS 121° | Rwy Idg 10501 TDZE 310 Apt Elev 312 |
|---------------------------|------------------------|--|

CONVERGING ILS RWY 12

WASHINGTON DULLES INTL (IAD)



A NA

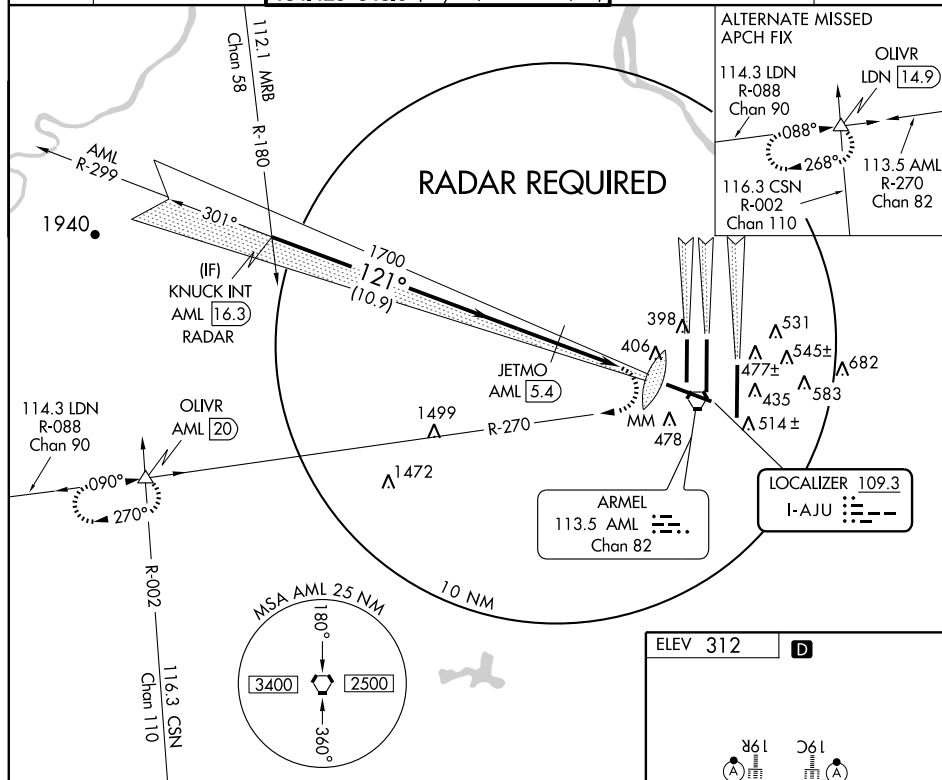
For inoperative MALSR, increase S-ILS 12 all Cats.
visibility to 2. Simultaneous converging approaches
authorized with Rwy 19L or 19C or 19R.

MALSR



MISSED APPROACH: Climbing right turn to 5000 via heading 290° and AML VORTAC R-270 to OLIVR INT/AML 20 DME and hold, continue climb-in-hold to 5000.

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|



VGSI and ILS glidepath not coincident.

KNUCK INT
AML 16.3
RADAR

JETMO
AML 5.4

AML
R-270

△

4500

12

GS 3 00°

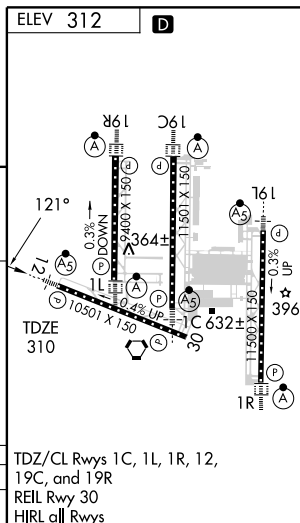
MM

CATEGORY

A

| | |
|--|--|
| | |
|--|--|

910-1½ 600 (600-1½)



TDZ/CL Rwy 1C, 1L, 1R, 12,
19C, and 19R
REIL Rwy 30
HIRL all Rwys

| | | | |
|----------------------------------|------------------------|-----------------------------|--|
| LOC I-DLX <u>111.3</u> | APP CRS 191° | Rwy Idg TDZE Apt Elev | 11501 272 312 |
|----------------------------------|------------------------|-----------------------------|--|

CONVERGING ILS RWY 19C

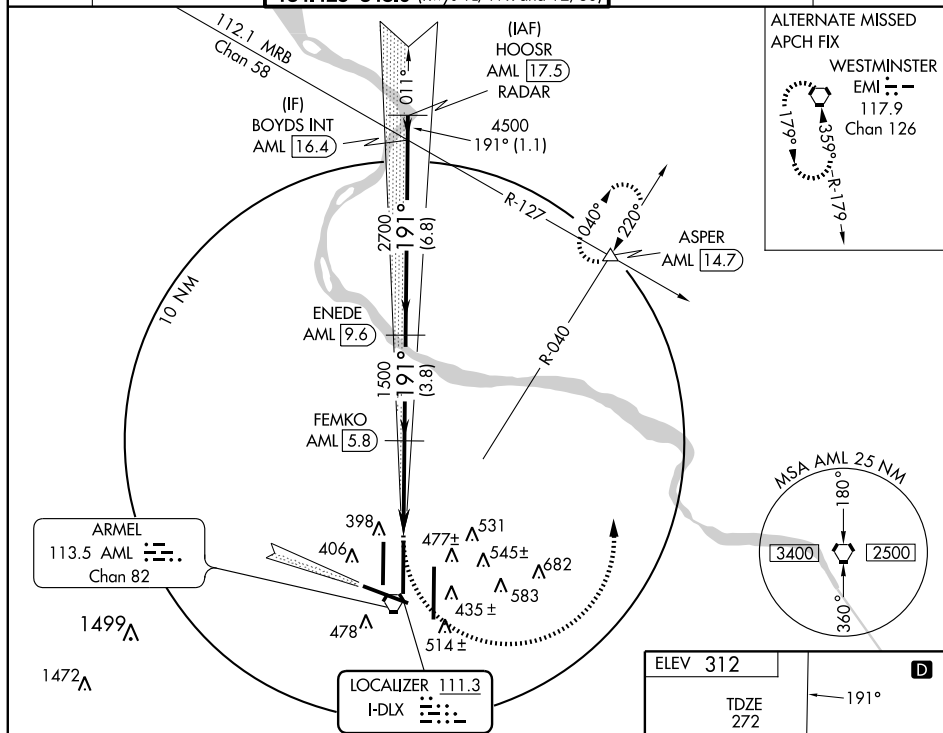
WASHINGTON DULLES INTL (IAD)

T Simultaneous converging approaches authorized with Rwy 12.
A NA For inoperative ALSF-2, increase S-ILS 19C all Cats visibility to 2.

ALSF-2

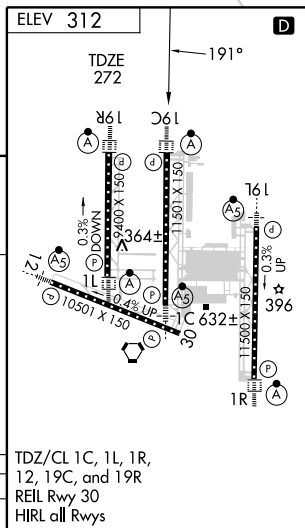
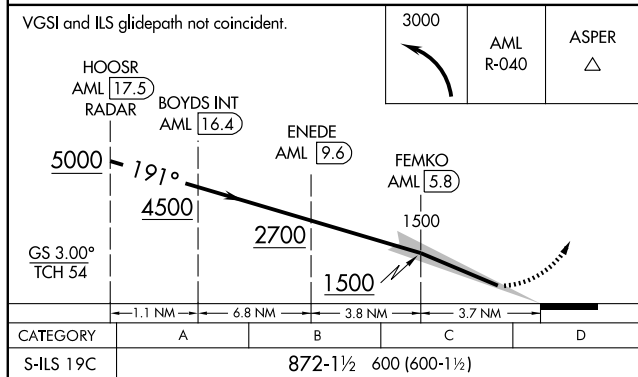
MISSED APPROACH: Climbing left turn to 3000 via AML VORTAC R-040 to ASPER INT/AML 14.7 DME and hold.

| | | | | | | |
|--------|-----------------|---------------------------------------|---------------------------|--------------------|---------------------|-------------|
| ATIS | POTOMAC APP CON | DULLES TOWER | | GND CON | | CLNC DEL |
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) | 120.25 348.6 (Rwy 1C/19C) | 121.9 317.8 (EAST) | 132.45 348.6 (WEST) | 135.7 317.8 |
| | | 134.425 348.6 (Rwys 1L/19R and 12/30) | | | | |



RADAR REQUIRED

VGSI and ILS glidepath not coincident.



| | | | |
|---|------------------------|-----------------------------|--|
| LOC/DME I-SGC 110.1 Chan 38 | APP CRS 191° | Rwy Idg TDZE Apt Elev | 11500 302 312 |
|---|------------------------|-----------------------------|--|

CONVERGING ILS RWY 19L

WASHINGTON DULLES INTL (IAD)

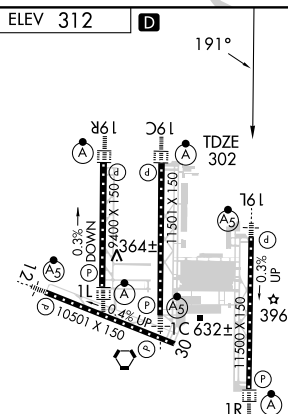
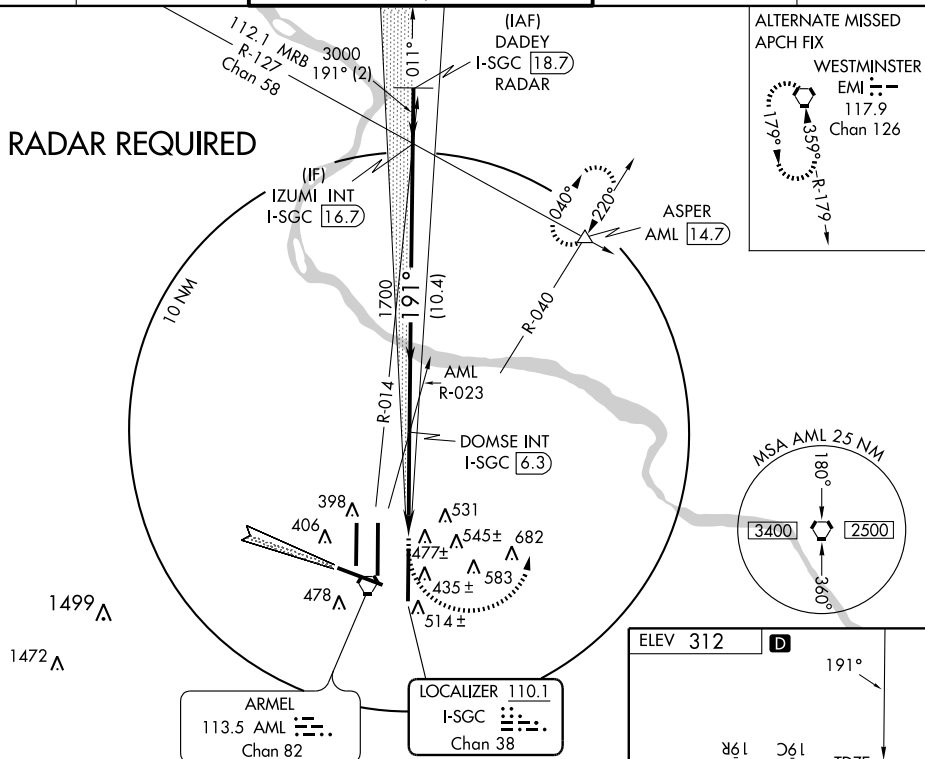
- T** Simultaneous converging approaches authorized with Rwy 12.
NA For inoperative MALSR, increase S-ILS 19L all Cats visibility to 2 miles.



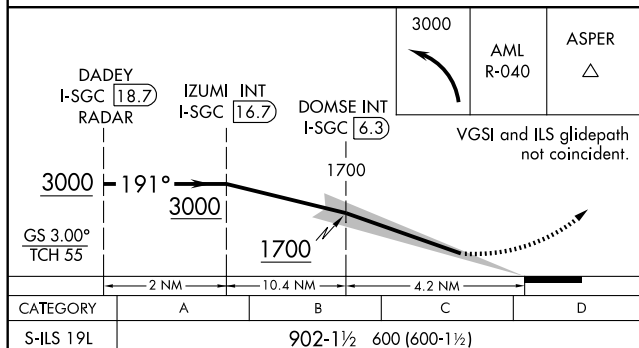
MALSR MISSED APPROACH: Climbing left turn to 3000 via AML VORTAC R-040 to ASPER INT/AML 14.7 DME and hold.

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|

RADAR REQUIRED



TDZ/CL 1C, 1L, 1R, 12, 19C, and 19R
 REIL Rwy 30
 HIRL all Rwys



| | | | |
|---|------------------------|-----------------------------|---|
| LOC/DME I-SU <u>110.75</u> Chgn 44 (Y) | APP CRS 191° | Rwy Idg TDZE Apt Elev | 9400 278 312 |
|---|------------------------|-----------------------------|---|

CONVERGING ILS RWY 19R

WASHINGTON DULLES INTL (IAD)

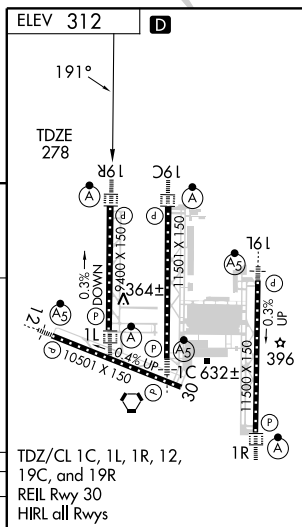
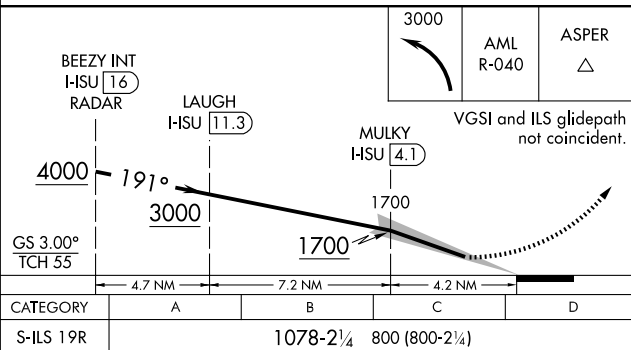
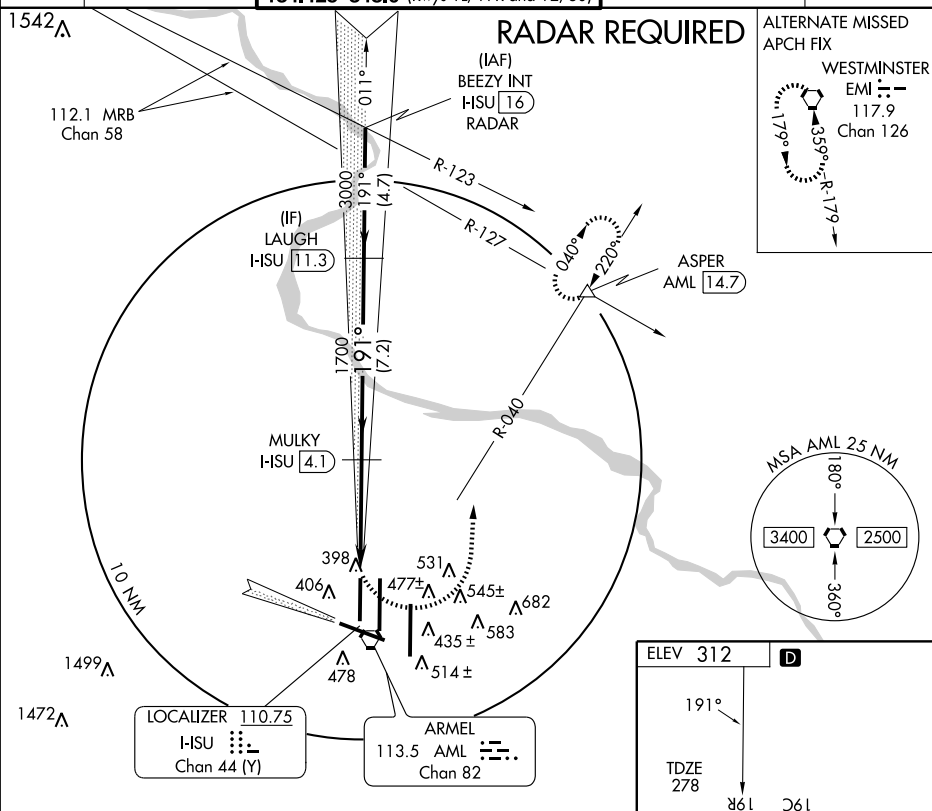
T Simultaneous converging approaches authorized with Rwy 12.
A NA For inoperative ALSF-2, increase S-ILS 19R all Cats visibility to 2³/₄ miles.

ALSF-2

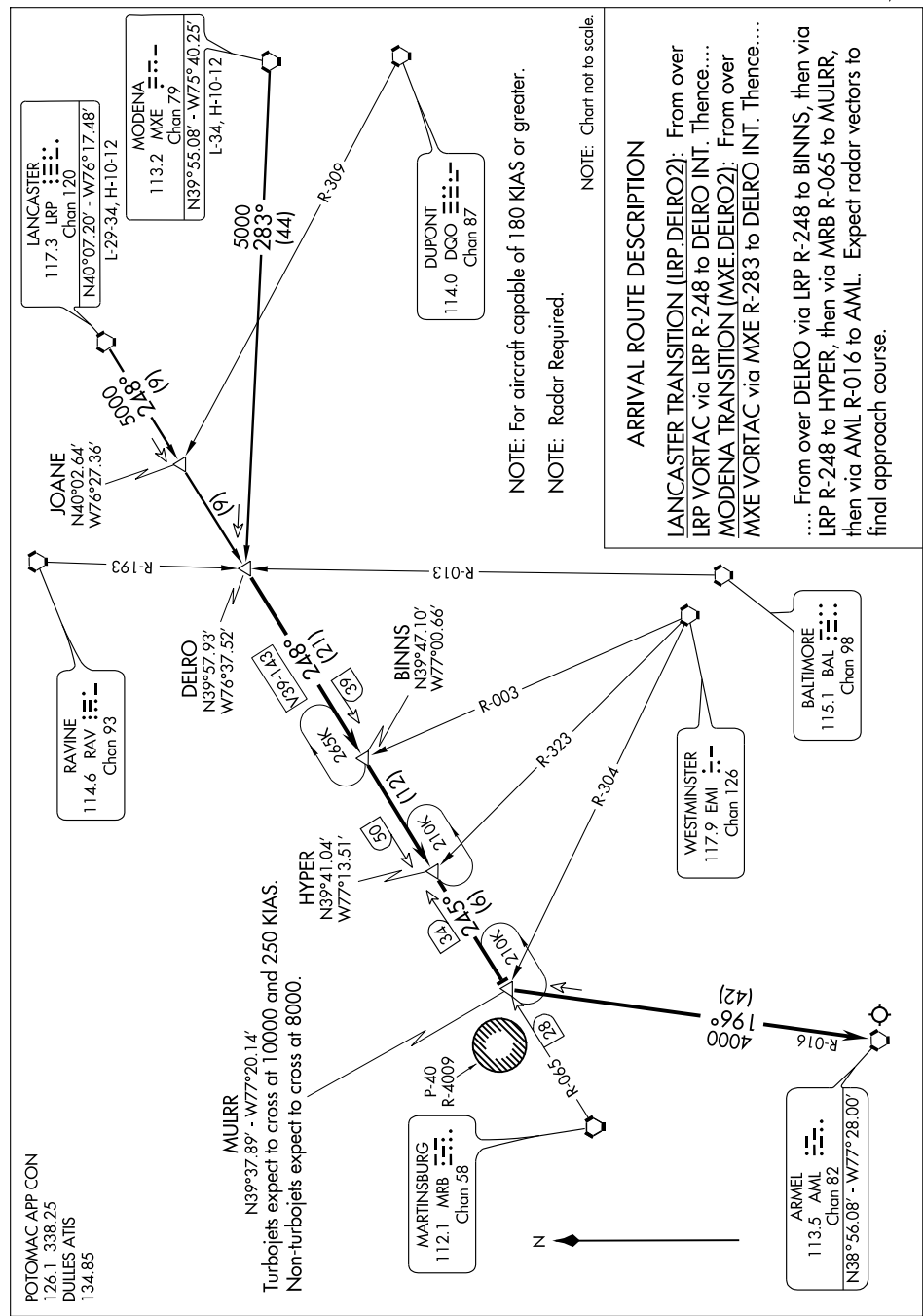


MISSED APPROACH: Climbing left turn to 3000 via AML VORTAC R-040 to ASPER INT/AML 14.7 DME and hold.

| | | | | |
|--------|-----------------|--|---|-------------|
| ATIS | POTOMAC APP CON | DULLES TOWER | GND CON | CLNC DEL |
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | 121.9 317.8 (EAST) 132.45 348.6 (WEST) | 135.7 317.8 |



NE-3, 21 OCT 2010 to 18 NOV 2010



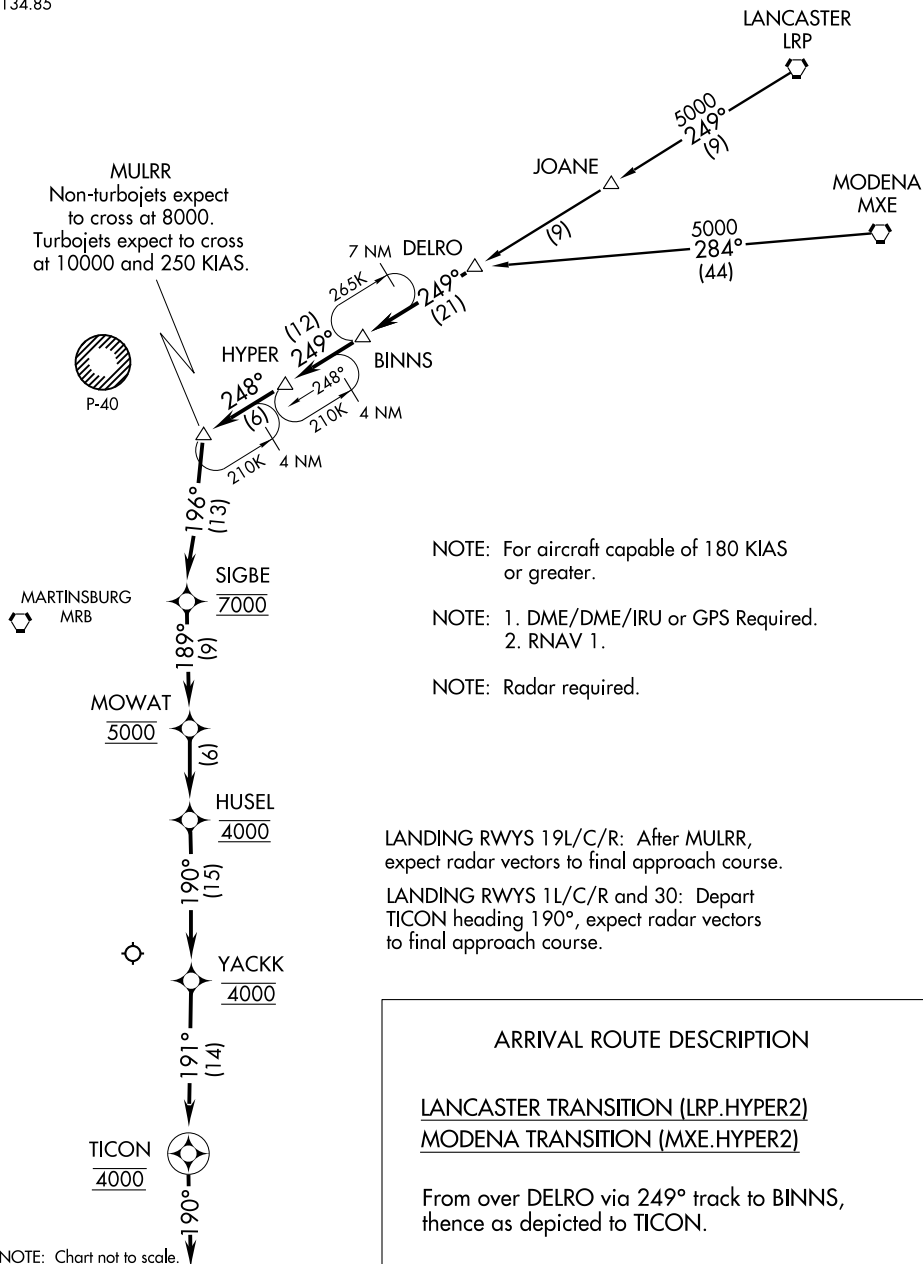
NE-3 21 OCT 2010 to 18 NOV 2010

(HYPER.HYPER2)

09015

ST-5100 (FAA)

HYPER TWO ARRIVAL (RNAV)

WASHINGTON DULLES INTL
WASHINGTON, DCPOTOMAC APP CON
126.1 338.25
DULLES ATIS
134.85

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

HYPER TWO ARRIVAL (RNAV)

(HYPER.HYPER2) 09015

WASHINGTON, DC
WASHINGTON DULLES INTL

| | | |
|----------------------------------|------------------------|--|
| LOC I-OSZ <u>111.3</u> | APP CRS 011° | Rwy Idg 11501 TDZE 286 Apt Elev 312 |
|----------------------------------|------------------------|--|


ILS or LOC/DME RWY 1C
WASHINGTON DULLES INTL (IAD)

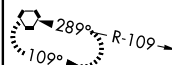
T For inoperative MALS R, increase S-LOC Cat D visibility to RVR 5000. DME from AML VORTAC. Simultaneous reception of I-OSZ and AML DME required. Simultaneous approach authorized with Rwy 1R or 1L. DME Required. Reduced lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of autoland or HUD to touchdown. † 1800 RVR authorized with the use of FD or AP or HUD to DA. LOC procedure NA during simultaneous operations.



MISSED APPROACH:
Climb to 3000 via
heading 011° and
FDK VOR R-200 to
FDK VOR and hold.


| | | | | | |
|--------|-----------------|---------------------------------------|---------------------|-------------|----------|
| ATIS | POTOMAC APP CON | DULLES TOWER | | GND CON | CLNC DEL |
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) | 121.9 317.8 (EAST) | 135.7 317.8 | |
| | | 120.25 348.6 (Rwy 1C/19C) | 132.45 348.6 (WEST) | | |
| | | 134.425 348.6 (Rwys 1L/19R and 12/30) | | | |


ALTERNATE MISSED
APCH FIX
MARTINSBURG
MRB 
112.1
Chan 58



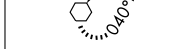
ARMEL
113.5 AML $\frac{113.5}{113.5}$
Chap 82

LOCALIZER 111.3
I-OSZ $\begin{array}{c} \cdot\cdot \\ \cdot\cdot \\ \cdot\cdot \end{array} \begin{array}{c} \cdot\cdot \\ \cdot\cdot \\ \cdot\cdot \end{array} \begin{array}{c} \cdot\cdot \\ \cdot\cdot \\ \cdot\cdot \end{array}$

MISSED APCH FIX
FREDERICK
FDK 
109.0




220° R-040



109°

1472 Å

CASANOVA
116.3 CSN 
Chap 110

5000
089°
(19)

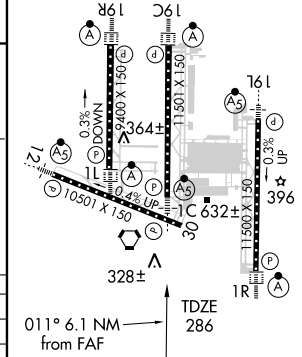
Figure 1-10 is a diagram of a typical ATIS broadcast. It shows a runway layout with various navigation aids and frequencies. Key elements include:

- Runway 15.3:** LUSIE INT, AML 15.3, RADAR.
- Runway 11.1:** PEPRR, AML 11.1.
- Runway 7.7:** CARRY, AML 7.7.
- Runway 5.8:** SKINS, AML 5.8.
- Runway 2.3:** RCHLE, AML 2.3.
- Runway 11.40:** MM, AML 11.40.

Frequencies shown include 5000, 3900, 2900, 2300, and 1140. A heading of 011° is indicated. A note states "VGS1 and ILS glidepath not coincident." and another note says "* LOC only."

| | | | | | | | |
|----------|----------------------|--------|--------|------------------------|-----|-----------------------|--|
| | 4.2 NM | 3.5 NM | 1.9 NM | 3.5 NM | 2.1 | 0.5 | |
| CATEGORY | A | | B | | C | D | |
| S-ILS 1C | † 486/24 200 (200-½) | | | | | | |
| S-LOC 1C | 580/24 294 (300-½) | | | | | 580/40 294 (300-¾) | |
| CIRCLING | 940-1 628 (700-1) | | | 940-1¾ 628 (700-1¾) | | 940-2 628 (700-2) | |

| | |
|----------|---|
| ELEV 312 | TDZ/CL Rwy 1C, 1L, 1R, 12, 19C and 19R REIL Rwy 30 HIRL all Rwys |
|----------|---|



| | | | | | |
|-------------------|------|------|------|------|------|
| FAF to MAP 6.1 NM | | | | | |
| Knots | 60 | 90 | 120 | 150 | 180 |
| Min:Sec | 6:06 | 4:04 | 3:03 | 2:26 | 2:02 |

ILS or LOC/DME RWY 1L
WASHINGTON DULLES INTL (IAD)

- ALSF-2

MISSED APPROACH: Climb to 800 then climbing left turn to 5000 via heading 240° and AML VORTAC R-270 to OLIVR INT/AML 20 DME and hold, continue climb-in-hold to 5000.

ALTERNATE MISSED APCH FIX
OLIVR
LDN 14.9
114.3 LDN
R-088
Chan 90
268
116.3 CSN
R-002
Chan 110

MISSED APCH FIX
OLIVR
AML 20
113.5 AML
R-270
Chan 82
270
116.3 CSN
R-002
Chan 110

CASANOVA
116.3 CSN
Chan 110

LOCALIZER 110.75
I-OIU
Chan 44 (Y)

ARMEL
113.5 AML
Chan 82

BIGGZ
I-OIU 9.7

FAZER
I-OIU 13.1

CINNA INT
I-OIU 17.5
RADAR

MSA AML 25 NM
180
360
3400
2500

10 NM

1499 R-270

1472

398

406

477

531

545

682

435

583

514

478

444

490

1900

1011

2900

1011

3000

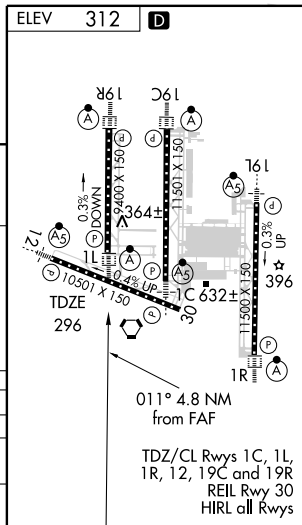
1011

3000

1011

DME or RADAR REQUIRED


| CINNA INT I-OIU [17.5] RADAR | VGSI and ILS glidepath not coincident. | 800 ↑ | 5000 hdg 240° | AML R-270 | OLIVR △ |
|------------------------------------|---|------------------------|----------------------|----------------------|-----------------------|
| 4000 | FAZER I-OIU [13.1] | BIGGZ I-OIU [9.7] | MORCE I-OIU [6.5] | I-OIU [2.6] | I-OIU [1.7] |
| GS 3.00° TCH 55 | * When assigned by ATC, intercept glidepath at 2900. | 1900 | 1900 | IM | |
| 4.4 NM | | 3.5 NM | 3.1 NM | 3.9 NM | 0.8 0.1 |
| CATEGORY | A | B | C | D | |
| S-ILS 1L | 496/18 200 (200-½) | | | | |
| S-LOC 1L | 660/24 364 (400-½) | | | | 660/40 364 (400-¾) |
| CIRCLING | 940-1 628 (700-1) | 940-1¾ 628 (700-1¾) | 940-2 628 (700-2) | 940-2 628 (700-2) | |



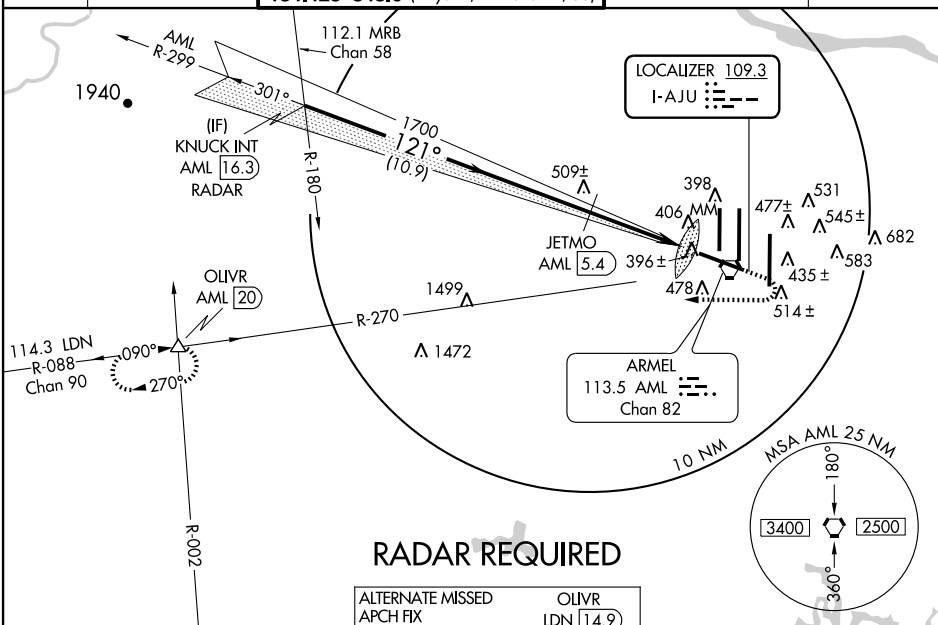
| | | |
|---------------------------|------------------------|--|
| LOC I-AJU 109.3 | APP CRS 121° | Rwy Idg 10501 TDZE 310 Apt Elev 312 |
|---------------------------|------------------------|--|

ILS or LOC/DME RWY 12

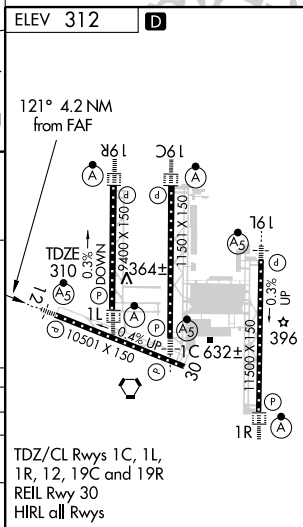
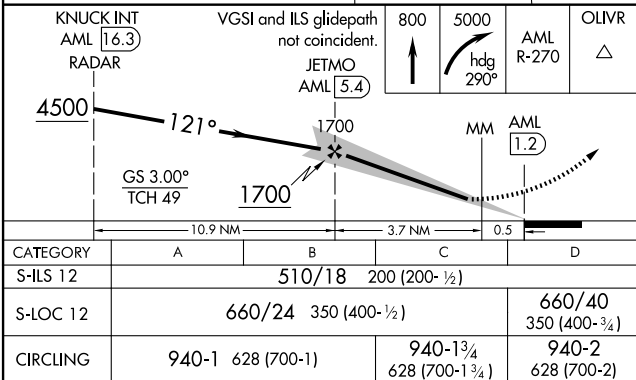
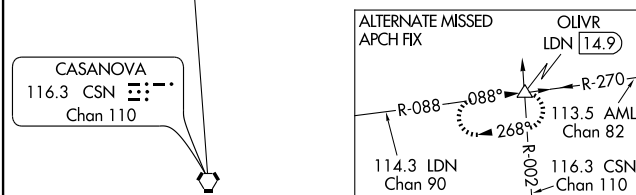
WASHINGTON DULLES INTL (IAD)

| | | | |
|------------------------------|---|--|---|
| <p>T A</p> | <p>DME from AML VORTAC. Simultaneous reception of I-AJU and AML DME required.</p> | <p>MALSR </p> | <p>MISSED APPROACH: Climb to 800 then climbing right turn to 5000 via heading 290° and AML VORTAC R-270 to OLIVR INT/AML 20 DME and hold, continue climb-in-hold to 5000.</p> |
|------------------------------|---|--|---|

| | | | | |
|----------------|-----------------------------------|--|--|-------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|----------------|-----------------------------------|--|--|-------------------------|



RADAR REQUIRED



| | | | |
|--|------------------------|-----------------------------|---|
| LOC/DME I-1SU 110.75 Chan 44 (Y) | APP CRS 191° | Rwy Idg TDZE Apt Elev | 9400 278 312 |
|--|------------------------|-----------------------------|---|

ILS or LOC/DME RWY 19R

WASHINGTON DULLES INTL (IAD)

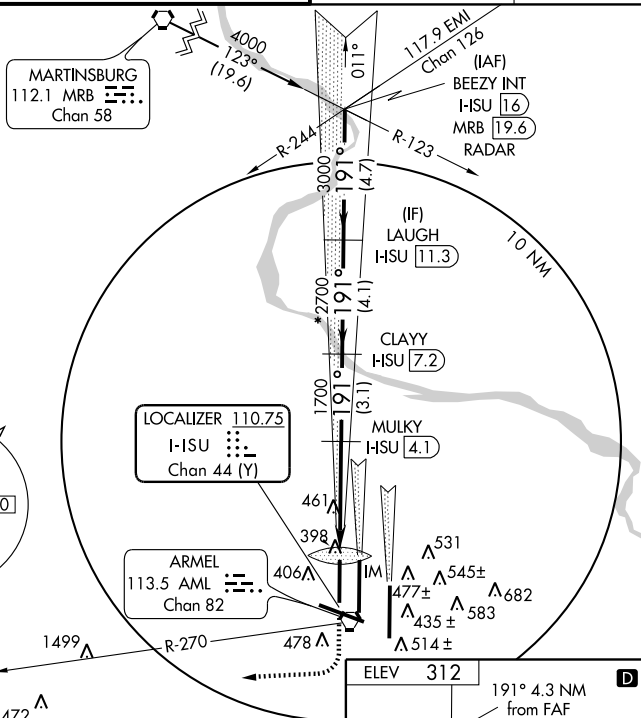
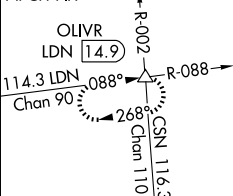
- V** Simultaneous approach authorized with Rwy 19C or 19L.
A LOC procedure NA during simultaneous operations.

ALSF-2

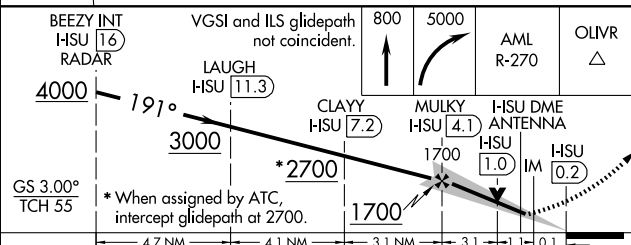
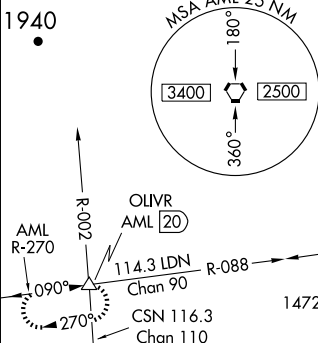


MISSED APPROACH: Climb to 800 then climbing right turn to 5000 via AML VORTAC R-270 to OLIVR INT/AML 20 DME and hold, continue climb-in-hold to 5000.

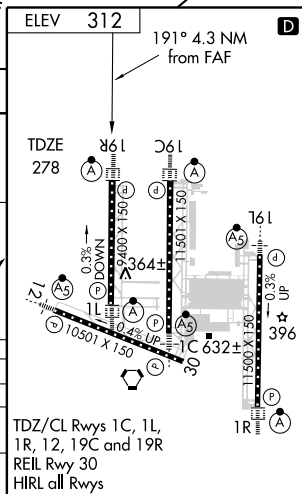
| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|

ALTERNATE MISSED
APCH FIX

DME or RADAR REQUIRED



| CATEGORY | A | B | C | D |
|-----------|--------|-------------|------------------------|-----------------------|
| S-ILS 19R | 478/18 | 200 (200-½) | | |
| S-LOC 19R | 720/24 | 442 (500-½) | 720/40 442 (500-¾) | 720/50 442 (500-1) |
| CIRCLING | 940-1 | 628 (700-1) | 940-1¾ 628 (700-1¾) | 940-2 628 (700-2) |



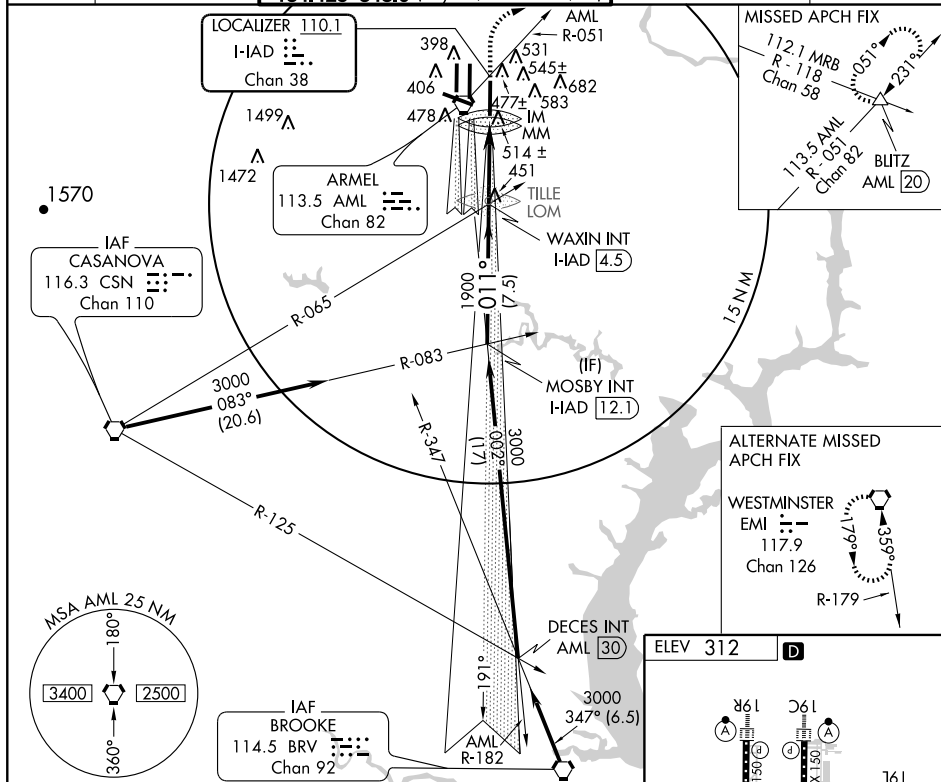
| | | | |
|--------------|-------------|----------|------------|
| LOC/DME I-AD | APP CRS | Rwy Idg | 11500 |
| 110.1 | 011° | TDZE | 312 |
| Chan 38 | | Apt Elev | 312 |

ILS or LOC RWY 1R

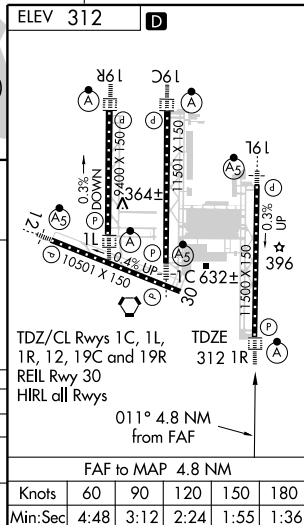
WASHINGTON DULLES INTL (IAD)

| | | | |
|----------------------|---|--------------------|--|
| V A | Simultaneous approach authorized with Rwy 1C or 1L. LOC procedure NA during simultaneous operations. | ALSF-2 A | MISSED APPROACH: Climb to 800 then climbing right turn to 3000 via heading 060° and AML VORTAC R-051 to BLITZ INT/AML 20 DME and hold. |
|----------------------|---|--------------------|--|

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|



| | | | | | | | |
|---------------------|--|--|--|-------------|------|---------------|-------|
| MOSBY INT I-AD 12.1 | | VGSI and ILS Glidepath not coincident. | | 800 | 3000 | AML R-051 | BLITZ |
| WAXIN INT I-AD 4.5 | | hdg 060° | | I-AD 0.9 | | I-AD DME ANT. | |
| 3000 | | 011° | | 1900 | | 1900 | |
| Procedure Turn NA | | GS 3.00° TCH 53 | | 7.5 NM | | 3.6 NM | |
| CATEGORY | | A | | B | | C | |
| S-ILS 1R | | 512/18 | | 200 (200-½) | | | |
| S-LOC 1R | | 760/24 | | 448 (500-½) | | 760/40 | |
| | | | | | | 448 (500-¾) | |
| | | | | | | 760/50 | |
| | | | | | | 448 (500-1) | |
| CIRCLING | | 940-1 | | 628 (700-1) | | 940-2 | |
| | | | | | | 628 (700-¾) | |
| | | | | | | 940-2 | |
| | | | | | | 628 (700-2) | |



| | | |
|---|------------------------|--|
| LOC/DME I-SGC 110.1 Chan 38 | APP CRS 191° | Rwy Idg 11500 TDZE 302 Apt Elev 312 |
|---|------------------------|--|

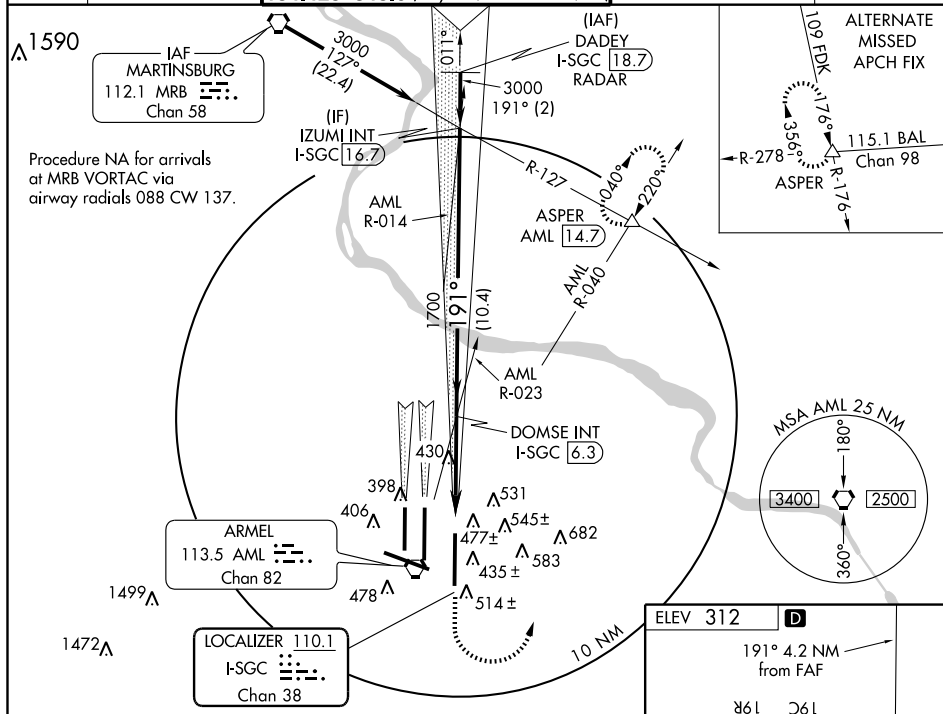
ILS or LOC RWY 19L
WASHINGTON DULLES INTL (IAD)

T Simultaneous approach authorized with Rwy 19C or 19R.
A LOC procedure NA during simultaneous operations. *1800 RVR authorized with the use of FD or AP or HUD to DA.
Reduced lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown.

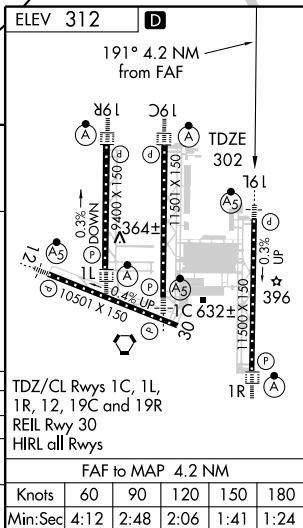
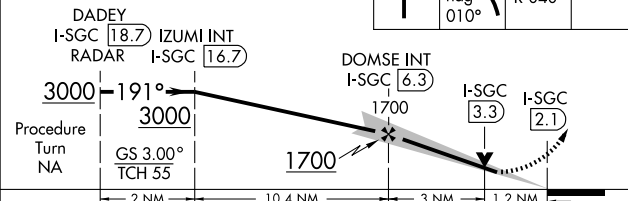
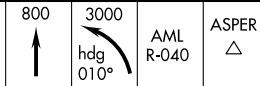
MALSR

MISSED APPROACH: Climb to 800 then climbing left turn to 3000 via heading 010° and AML VORTAC R-040 to ASPER INT/AML 14.7 DME and hold.

| | | | | | |
|--------|-----------------|---------------------------------------|---------------------------|---------------------|-------------|
| ATIS | POTOMAC APP CON | DULLES TOWER | | GND CON | CLNC DEL |
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) | 120.25 348.6 (Rwy 1C/19C) | 121.9 317.8 (EAST) | 135.7 317.8 |
| | | 134.425 348.6 (Rwys 1L/19R and 12/30) | | 132.45 348.6 (WEST) | |



VGSI and ILS glidepath not coincident.

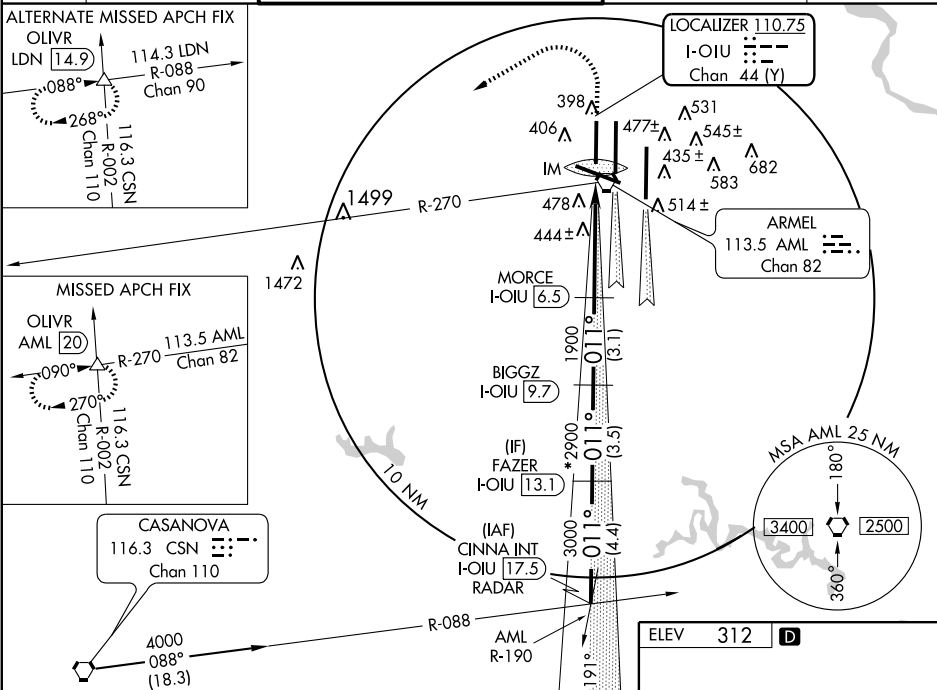


| CATEGORY | A | B | C | D |
|-----------|----------------------|---|-----------------------|---|
| S-ILS 19L | * 502/24 200 (200-½) | | | |
| S-LOC 19L | 740/24 438 (500-½) | 740/40 438 (500-¾) | 740/50 438 (500-1) | |
| CIRCLING | 940-1 628 (700-1) | 940-1 ³ / ₄ 628 (700-1¾) | 940-2 628 (700-2) | |

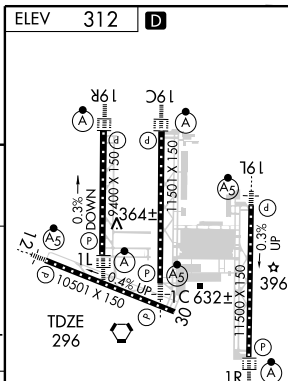
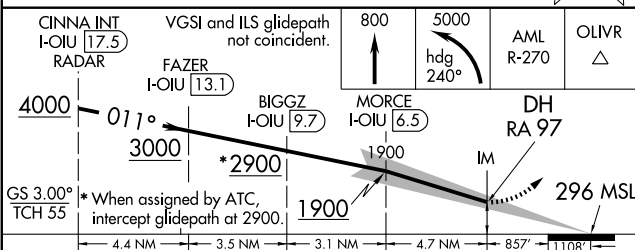
| | | |
|--|------------------------|---|
| LOC/DME I-OIU 110.75 Chan 44 (Y) | APP CRS 011° | Rwy Idg 9400 TDZE 296 Apt Elev 312 |
|--|------------------------|---|

ILS RWY 1L (CAT II)
WASHINGTON DULLES INTL (IAD)

| | | | | | |
|--|--|---|---|--|--|
| <div><div><div></div><div></div></div><div>Simultaneous approach authorized with Rwy 1R or 1C.</div></div> | | <div><div>ALSF-2</div><div><div><div></div><div></div></div><div></div></div></div> | MISSED APPROACH: Climb to 800 then climbing left turn to 5000 via heading 240° and AML VORTAC R-270 to OLIVR INT/AML 20 DME and hold, continue climb-in-hold to 5000. | | |
| <div><div>ATIS</div><div>134.85</div></div> | <div><div>POTOMAC APP CON</div><div>120.45 306.925</div></div> | <div><div>DULLES TOWER</div><div>120.1 317.8 (Rwy 1R/19L)</div><div>120.25 348.6 (Rwy 1C/19C)</div><div>134.425 348.6 (Rwys 1L/19R and 12/30)</div></div> | | <div><div>GND CON</div><div>121.9 317.8 (EAST)</div><div>132.45 348.6 (WEST)</div></div> | <div><div>CLNC DEL</div><div>135.7 317.8</div></div> |



DME or RADAR REQUIRED



TDZ/CL Rwy 1C, 1L,
1R, 12, 19C and 19R
REIL Rwy 30
HRL all Rwys

CATEGORY II ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED

| | | | |
|--|------------------------|-----------------------------|---|
| LOC/DME I-OIU 110.75 Chan 44 (Y) | APP CRS 011° | Rwy Idg TDZE Apt Elev | 9400 296 312 |
|--|------------------------|-----------------------------|---|

ILS RWY 1L (CAT III)

WASHINGTON DULLES INTL (IAD)



Simultaneous approach authorized with Rwy 1R or 1C.

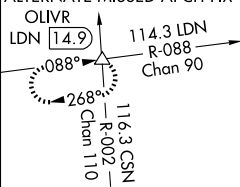
ALSF-2



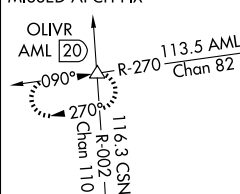
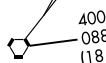
MISSED APPROACH: Climb to 800 then climbing left turn to 5000 via heading 240° and AML VORTAC R-270 to OLVR INT/AML 20 DME and hold, continue climb-in-hold to 5000.

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|

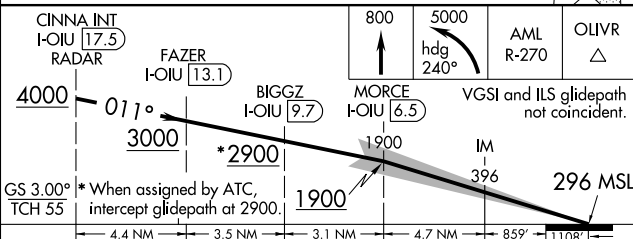
ALTERNATE MISSED APCH FIX



MISSED APCH FIX

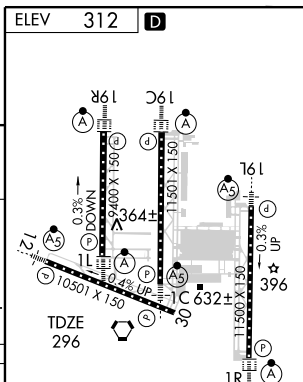
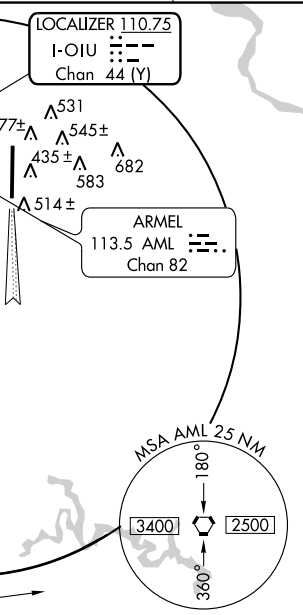
CASANOVA
116.3 CSN
Chan 110

DME or RADAR REQUIRED



| CATEGORY | A | B | C | D |
|----------|---|----------|--------|---|
| S-ILS 1L | | CAT IIIa | RVR 07 | |
| S-ILS 1L | | CAT IIIb | RVR 06 | |
| S-ILS 1L | | CAT IIIc | NA | |

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwys 1C, 1L, 1R, 12, 19C and 19R
REIL Rwy 30
HIRL all Rwys

ILS RWY 1R (CAT II)
WASHINGTON DULLES INTL (IAD)

ALSF-2

MISSED APPROACH: Climb to 800 then climbing right turn to 3000 via heading 060° and AML VORTAC R-051 to BLITZ INT/AML 20 DME and hold.

The map displays the following locations and details:

- Central Area (HANOI):**
 - LOCALIZER 110.1:** I-IAD Chan 38
 - ARMEL:** 113.5 AML Chan 82
 - WAXIN INT:** HAD 4.5
 - MOSBY INT:** I-IAD 12.1
 - DECES INT:** AML 30
 - IAF BROOKE:** 114.5 BRV Chan 92
- Top Right (MISSED APCH FIX):**
 - 112.1 MRB R-118 Chan 58
 - 113.5 AML R-061 Chan 82
 - BLITZ AML 20
- Bottom Right (ALTERNATE MISSED APCH FIX):**
 - WESTMINSTER:** EMI 117.9 Chan 126
- Bottom Left (MSA AML 25 NM):**
 - 3400
 - 2500
 - 360°
- Other Labels:**
 - 1570
 - 1499
 - 1472
 - 398
 - 406
 - 478
 - 531
 - 545±
 - 682
 - 583
 - IM
 - MM
 - 514±
 - 451
 - TITLE LOM
 - R-065
 - R-083
 - R-347
 - R-125
 - R-182
 - 1900
 - 1517
 - 110
 - 3000
 - 083° (20.6)
 - 1911
 - 347° (6.5)
 - ELEV 312
 - D
 - 19R
 - 19C
 - 19B
 - 19A

| | | | |
|----------|--------------------------|--------------|------------|
| 800 ↑ | 3000 ↗ hdg 060° | AML R-051 | BLITZ △ |
|----------|--------------------------|--------------|------------|

TDZ/CL Rwy 1C, 1L, 1R, 12,
19C and 19R
REIL Rwy 30
HIRL all Rwys

CATEGORY II ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED

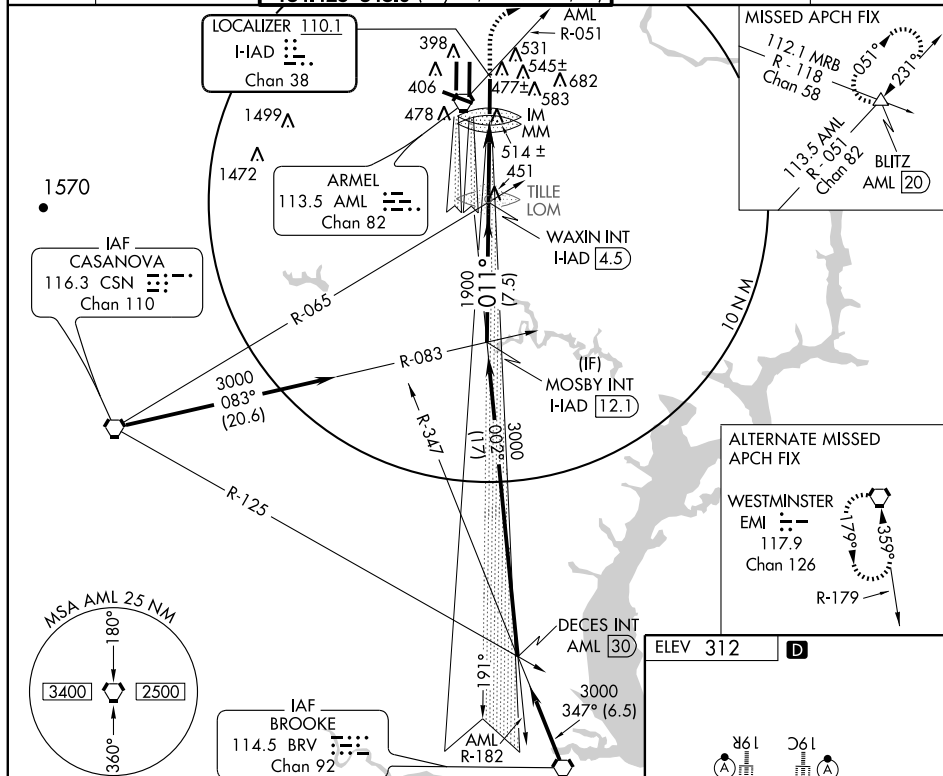
| | | | |
|---------------|-------------|----------|------------|
| LOC/DME I-IAD | APP CRS | Rwy Idg | 11500 |
| 110.1 | 011° | TDZE | 312 |
| Chan 38 | | Apt Elev | 312 |

ILS RWY 1R (CAT III)

WASHINGTON DULLES INTL (IAD)

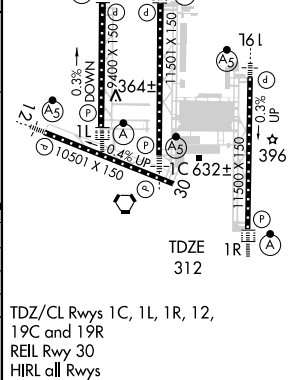
| | | |
|--|------------|---|
| V A Simultaneous approach authorized with Rwy 1C or 1L. | ALSF-2 | MISSED APPROACH: Climb to 800 then dimbing right turn to 3000 via heading 060° and AML VORTAC R-051 to BLITZ INT/AML 20 DME and hold. |
|--|------------|---|

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|



| | | | | | | | |
|-------------------|----------------------|--|---------------------|--------|----------|-----------|-------|
| Procedure Turn NA | MOSBY INT I-IAD 12.1 | VGSI and ILS Glidepath not coincident. | WAXIN INT I-IAD 4.5 | 800 | 3000 | AML R-051 | BLITZ |
| GS 3.00° TCH 53 | 3000 | 011° | 1900 | MM 533 | hdg 060° | IM 409 | |
| | 7.5 NM | 4.3 NM | 2431' | 850' | 1050' | | |
| CATEGORY | A | B | C | D | | | |
| S-ILS 1R | | CAT IIIa | RVR 07 | | | | |
| S-ILS 1R | | CAT IIIb | RVR 06 | | | | |
| S-ILS 1R | | CAT IIIc | NA | | | | |

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwys 1C, 1L, 1R, 12, 19C and 19R
 REIL Rwy 30
 HIRL all Rwys

| | | |
|----------------------------------|------------------------|--|
| LOC I-DLX <u>111.3</u> | APP CRS 191° | Rwy Idg 11501 TDZE 272 Apt Elev 312 |
|----------------------------------|------------------------|--|

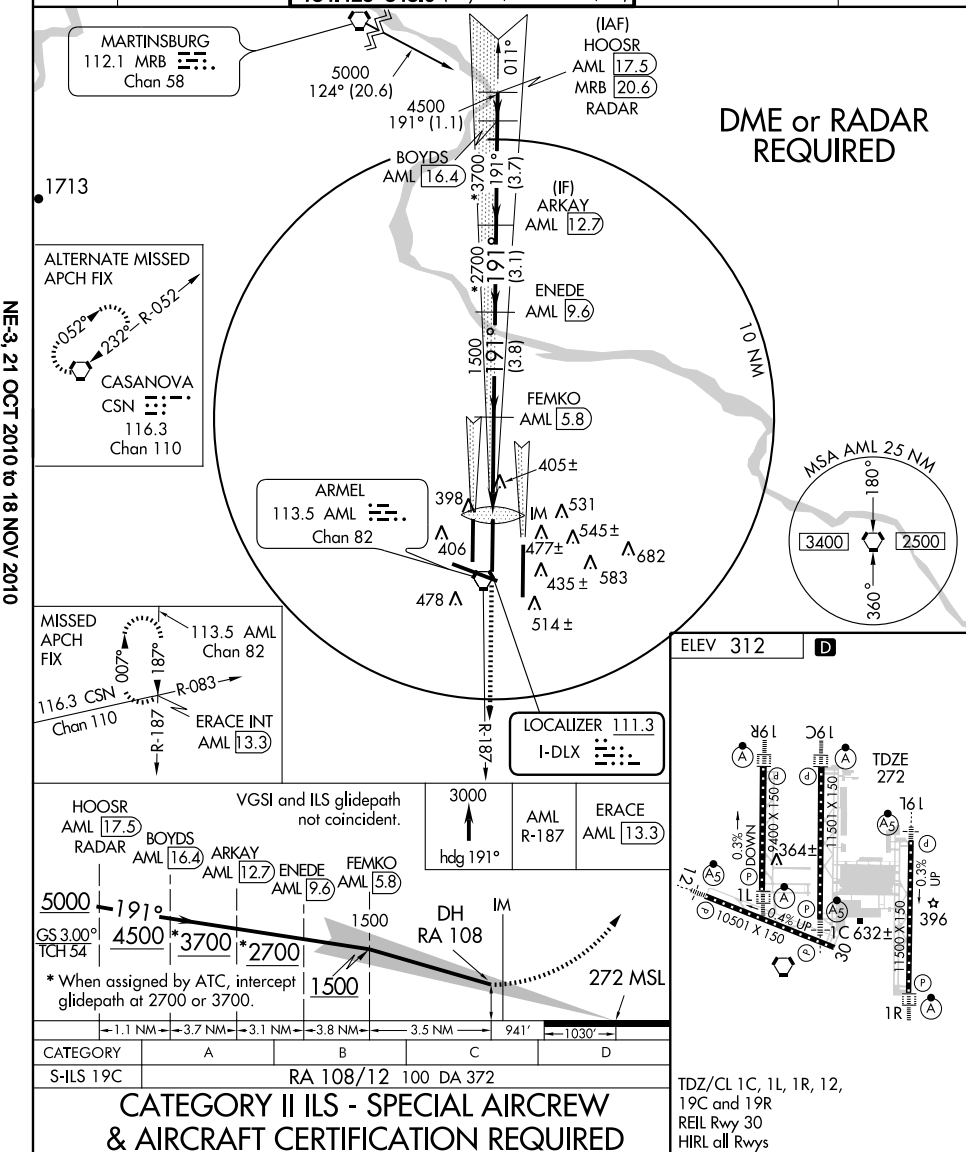
ILS RWY 19C (CAT II)
WASHINGTON DULLES INTL (IAD)

T DME from AML VORTAC.
A Simultaneous reception of I-DLX and AML DME required.
Simultaneous approach authorized with Rwy 19L or 19R.

ALSF-2

MISSED APPROACH: Climb to 3000 via heading 191° and AML VORTAC R-187 to ERACE INT/AML 13.3 DME and hold.

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|



NE-3. 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

| | | |
|----------------------------------|------------------------|--|
| LOC I-DLX <u>111.3</u> | APP CRS 191° | Rwy Idg 11501 TDZE 272 Apt Elev 312 |
|----------------------------------|------------------------|--|

ILS RWY 19C (CAT III)

WASHINGTON DULLES INTL (IAD)



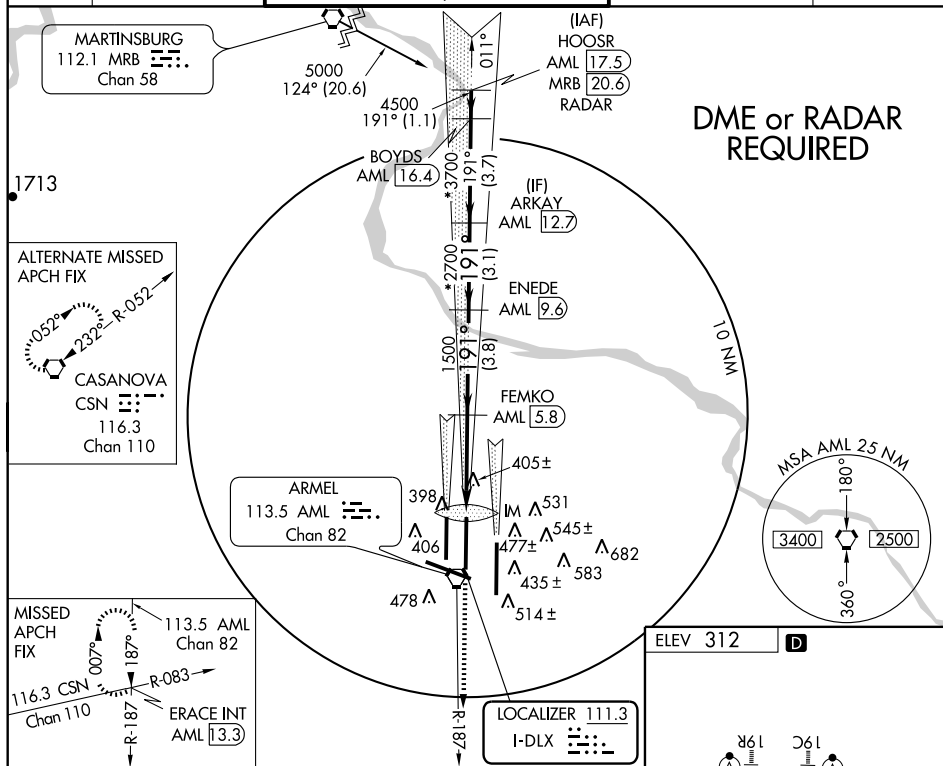
DME from AML VORTAC.
Simultaneous reception of I-DLX and AML DME required.
Simultaneous approach authorized with Rwy 19L or 19R.

ALSF-2



MISSED APPROACH: Climb to 3000 via heading 191° and AML VORTAC R-187 to ERACE INT/AML 13.3 DME and hold.

| | | | | |
|----------------|-----------------------------------|--|--|-------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|----------------|-----------------------------------|--|--|-------------------------|



S-ILS 19C

HOOSR AML 17.5
BOYDS AML 16.4
ARKAY AML 12.7
ENEDE AML 9.6
FEMKO AML 5.8
ERACE INT AML 13.3

5000
191°
4500
3700
2700
1500
722 MSL

GS 3.00°
TCH 54

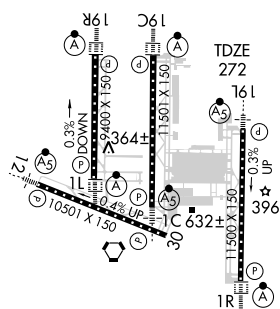
* When assigned by ATC, intercept glidepath at 2700 or 3700.

1.1 NM
3.7 NM
3.1 NM
3.8 NM
3.5 NM
880'
1030'

VGS and ILS glidepath not coincident.

| CATEGORY | A | B | C | D |
|-----------|---|----------|--------|---|
| S-ILS 19C | | CAT IIIa | RVR 07 | |
| S-ILS 19C | | CAT IIIb | RVR 06 | |
| S-ILS 19C | | CAT IIIc | NA | |

CATEGORY III ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL 1C, 1L, 1R, 12,
19C and 19R
REIL Rwy 30
HIRL all Rwys

| | | |
|---|------------------------|--|
| LOC/DME I-SGC 110.1 Chan 38 | APP CRS 191° | Rwy Idg 11500 TDZE 302 Apt Elev 312 |
|---|------------------------|--|

ILS RWY 19L (CAT II)
WASHINGTON DULLES INTL (IAD)

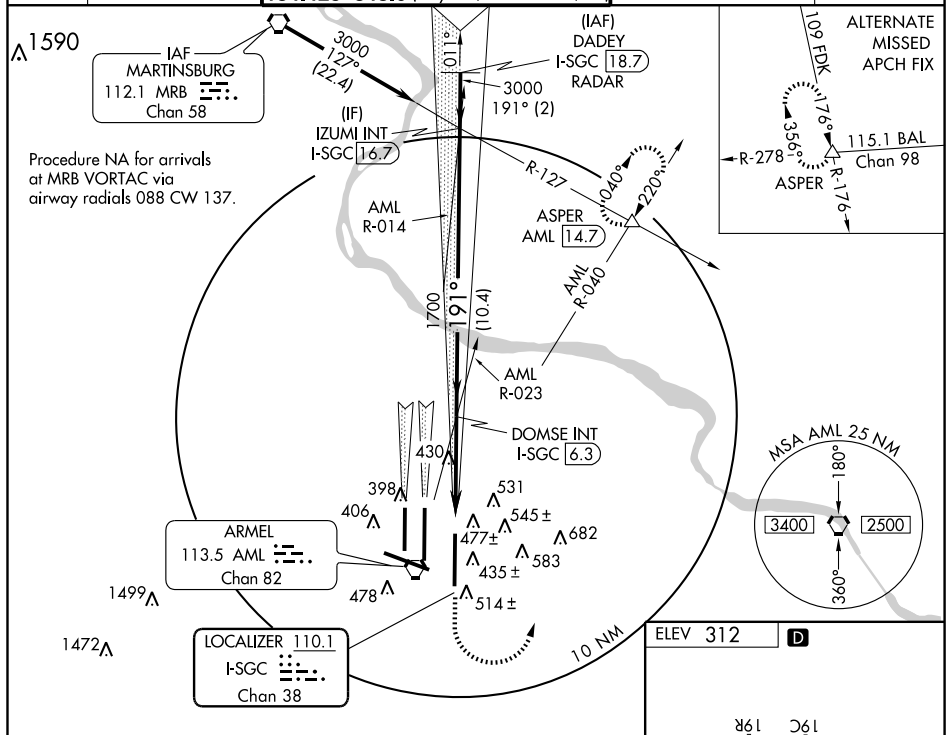
| | |
|----------|---|
| T | Simultaneous approach authorized with Rwy 19C or 19R. |
| A | Reduced lighting: Requires specific OPSPEC, MSPEC, or LOA approval and use of Autoland or HUD to touchdown. |

MAISR

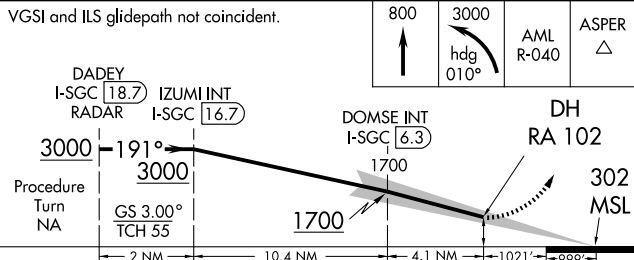


MISSED APPROACH: Climb to 800 then climbing left turn to 3000 via heading 010° and AML VORTAC R-040 to ASPER INT/AML 14.7 DME and hold.

| | | | | | |
|--------|-----------------|---------------------------------------|---------------------|---------|-------------|
| ATIS | POTOMAC APP CON | DULLES TOWER | | GND CON | CLNC DEL |
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) | 121.9 317.8 (EAST) | | 135.7 317.8 |
| | | 120.25 348.6 (Rwy 1C/19C) | 132.45 348.6 (WEST) | | |
| | | 134.425 348.6 (Rwys 1L/19R and 12/30) | | | |

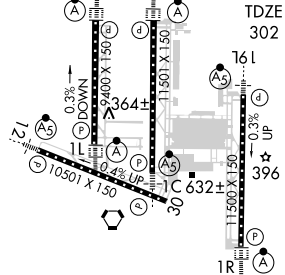


VGSI and ILS glidepath not coincident.



| CATEGORY | A | B | C | D |
|-----------|----------------------|---|---|---|
| S-ILS 19L | RA 102/12 100 DA 402 | | | |



CATEGORY II ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 1C, 1L,
1R, 12, 19C and 19R
REIL Rwy 30
HIRL all Rwys

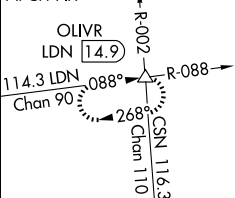
| | | |
|--|------------------------|---|
| LOC/DME I- ISU 110.75 Chan 44 (Y) | APP CRS 191° | Rwy Idg 9400 TDZE 278 Apt Elev 312 |
|--|------------------------|---|

ILS RWY 19R (CAT II)
WASHINGTON DULLES INTL (IAD)

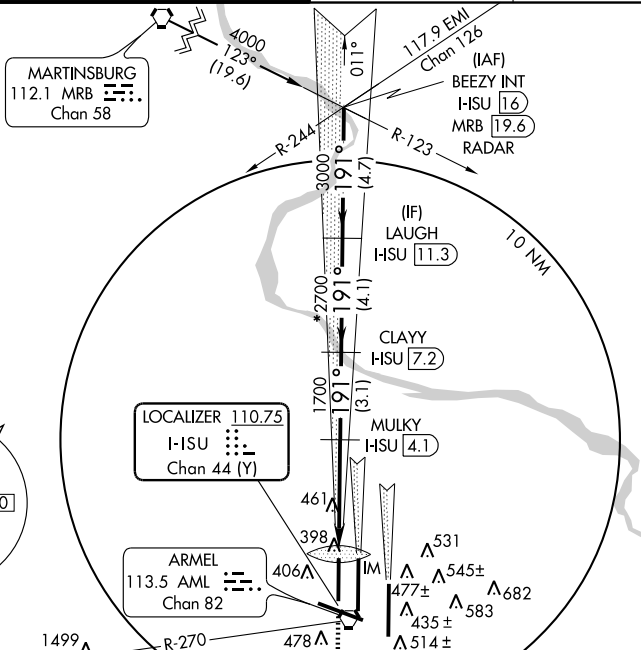
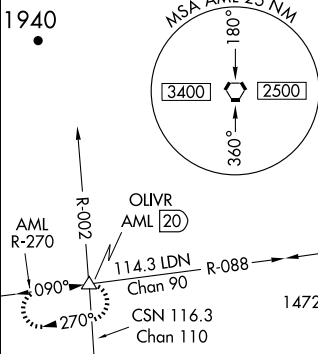
| | | | |
|---|---|---|--|
|  | Simultaneous approach authorized with Rwy 19C or 19L. | ALSF-2  | MISSED APPROACH: Climb to 800 then climbing right turn to 5000 via AML VORTAC R-270 to OLVR INT/AML 20 DME and hold, continue climb-in-hold to 5000. |
|---|---|---|--|

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|

ALTERNATE MISSED
APCH FIX



DME or RADAR
REQUIRED



| | | | | | | | |
|-------------------------------|---|---|-------------------|-------------------|------------------|-----------------|------------|
| BEEZY INT I-SU 16 RADAR | | VGS1 and ILS glidepath not coincident. | | 800 ↑ | 5000 ↗ | AML R-270 | OLIVR △ |
| 4000 | | LAUGH I-SU 11.3 | CLAYY I-SU 7.2 | MULKY I-SU 4.1 | I-SU DME ANT. | DH IM RA 103 | |
| 3000 | | *2700 | | 1700 | 278 MSL | | |
| GS 3.00° TCH 55 | | * When assigned by ATC, intercept glidepath at 2700. | | 1700 | | | |
| 4.7 NM | | 4.1 NM | | 3.1 NM | 4.1 NM | 878' | 1050' |
| CATEGORY | A | | B | C | | D | |
| S-ILS 19R | | | RA 103/12 | | 100 DA 378 | | |

CATEGORY II ILS - SPECIAL AIRCREW
& AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy 1C, 1L,
1R, 12, 19C and 19R
REIL Rwy 30
HRL all Rwy 30

(LEGGO.LEGGO2)

09015

ST-5100 (FAA)

WASHINGTON DULLES INTL
WASHINGTON, DC

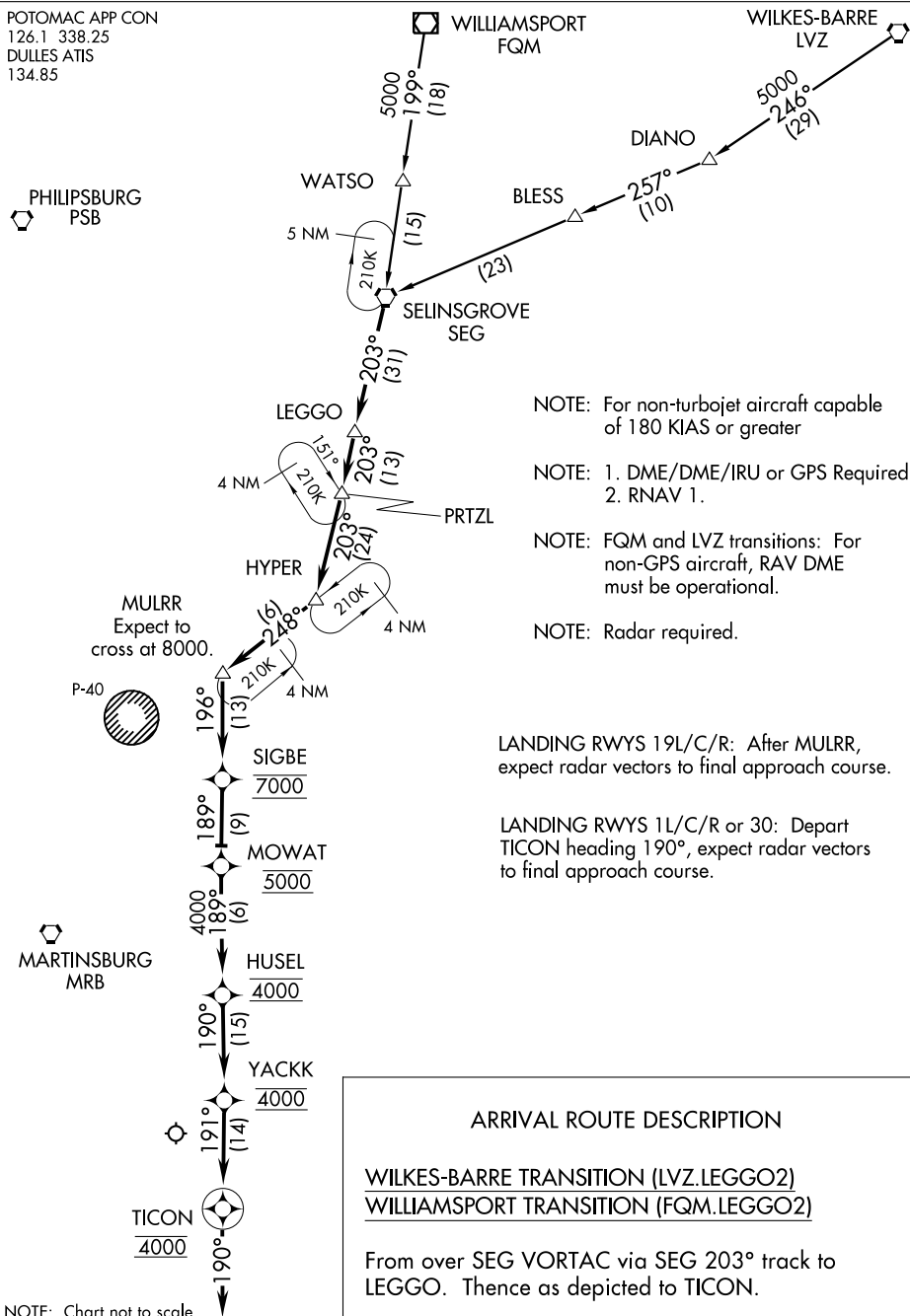
LEGGO TWO ARRIVAL (RNAV)

POTOMAC APP CON
126.1 338.25
DULLES ATIS
134.85

PHILIPSBURG
PSB

WILLIAMSPORT
FQM

WILKES-BARRE
LVZ



- NOTE: For non-turbojet aircraft capable of 180 KIAS or greater
- NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.
- NOTE: FQM and LVZ transitions: For non-GPS aircraft, RAV DME must be operational.
- NOTE: Radar required.

LANDING RWYS 19L/C/R: After MULRR, expect radar vectors to final approach course.

LANDING RWYS 1L/C/R or 30: Depart TICON heading 190°, expect radar vectors to final approach course.

ARRIVAL ROUTE DESCRIPTION

WILKES-BARRE TRANSITION (LVZ.LEGGO2)
WILLIAMSPORT TRANSITION (FQM.LEGGO2)

From over SEG VORTAC via SEG 203° track to LEGGO. Thence as depicted to TICON.

NOTE: Chart not to scale.

LEGGO TWO ARRIVAL (RNAV)

(LEGGO.LEGGO2)

09015

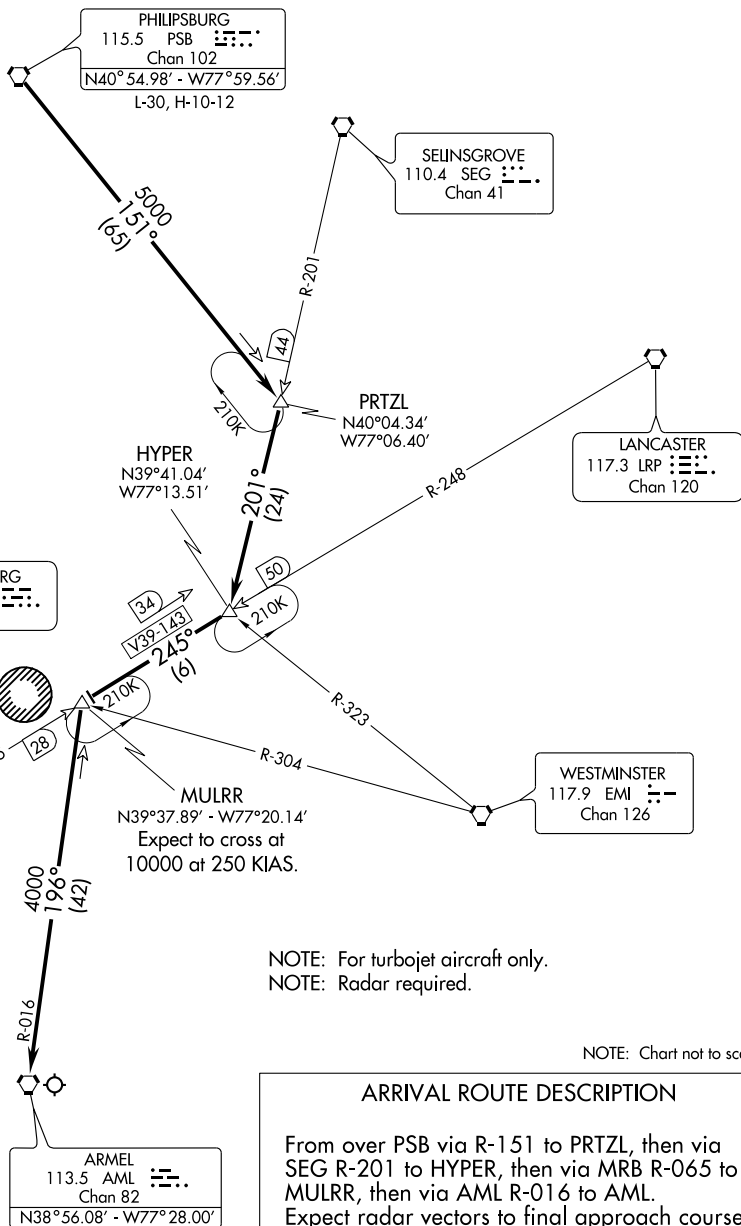
WASHINGTON, DC
WASHINGTON DULLES INTL

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

PHILPSBURG TWO ARRIVAL

POTOMAC APP CON
126.1 338.25
DULLES ATIS
134.85



NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3, 21 OCT 2010 to 18 NOV 2010

PHILPSBURG TWO ARRIVAL

PRTZL THREE ARRIVAL (RNAV)

POTOMAC APP CON
126.1 338.25
DULLES ATIS
134.85

PHILIPSBURG
PSB

NOTE: For turbojet aircraft only.

NOTE: 1. DME/DME/IRU or GPS Required.
2. RNAV 1.

NOTE: Radar required.

NOTE: For non-GPS equipped aircraft, EMI and RAV DMEs must be operational.

LANDING RWYS 19L/C/R: After MULRR, expect radar vectors to final approach course.

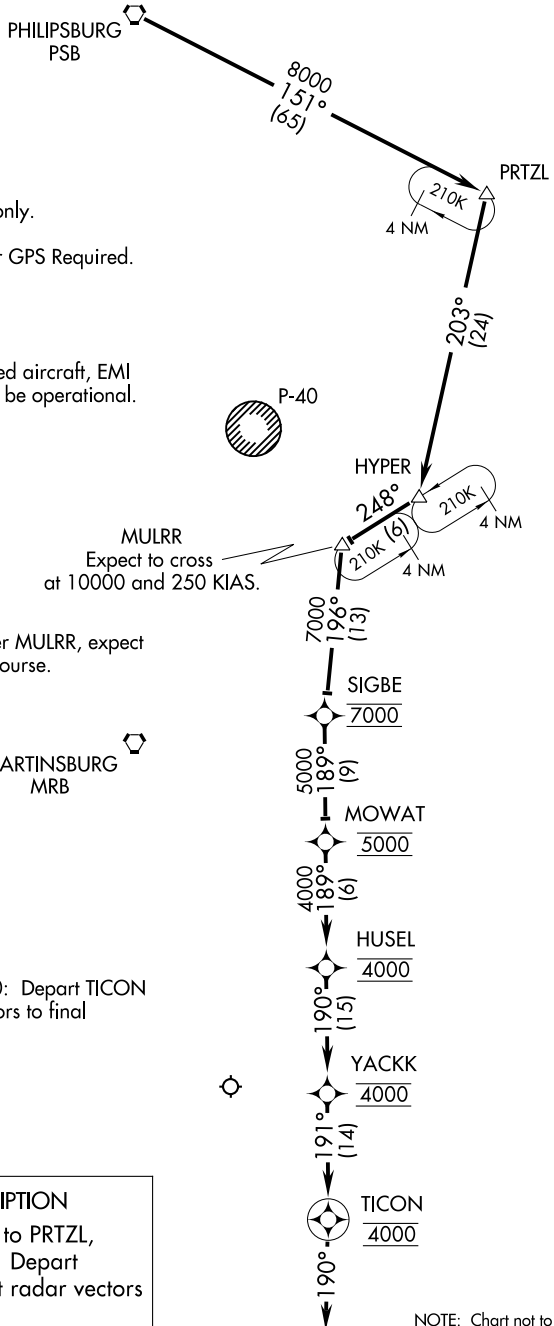
MARTINSBURG
MRB

LANDING RWYS 1L/C/R and 30: Depart TICON heading 190°, expect radar vectors to final approach course.

ARRIVAL ROUTE DESCRIPTION

From over PSB via 151° track to PRTZL,
thence as depicted to TICON. Depart
TICON heading 190°. Expect radar vectors
to final approach course.

NOTE: Chart not to scale.



PRTZL THREE ARRIVAL (RNAV)

(PRTZL.PRTZL3) 09015

WASHINGTON, DC
WASHINGTON DULLES INTL

NE-3, 21 OCT 2010 to 18 NOV 2010

| | | | |
|--|------------------------|-----------------------------|---|
| WAAS CH 99309 W01D | APP CRS 011° | Rwy Idg TDZE Apt Elev | 9400 296 312 |
|--|------------------------|-----------------------------|---|

RNAV (GPS) RWY 1L

WASHINGTON DULLES INTL (IAD)

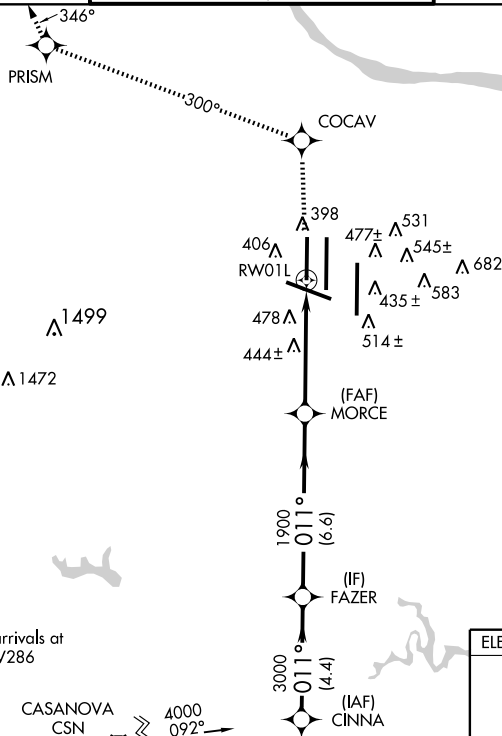
▼ For inoperative ALSF-2, increase LNAV Cat D visibility to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below
-15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.



MISSED APPROACH: Climb to 4000 direct COCAV and via 300° track to PRISM and via 346° track to MRB VORTAC and hold.

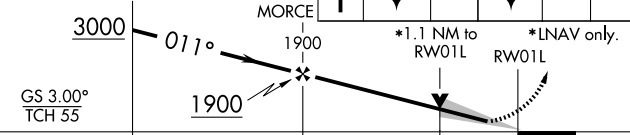
| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|

MISSED APCH FIX
MARTINSBURG
MRB

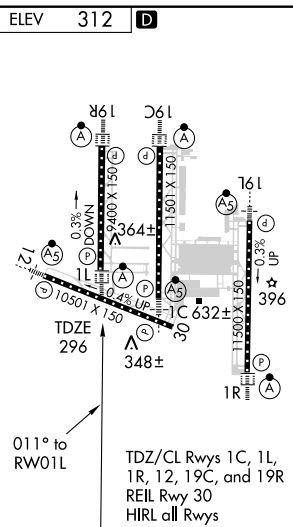


Procedure NA for arrivals at
CSN VORTAC via V286
northwest bound.

| Procedure | Turn | NA | VSGI and RNAV glidepath not coincident. | 4000 | COCAV | PRISM | MRB |
|-----------|------|----|---|------|-------|-------|-----|
|-----------|------|----|---|------|-------|-------|-----|



| CATEGORY | A | B | C | D |
|--------------|--------------------|---------------------|--------------------|---|
| LPV DA | 496/24 | 200 (200-½) | | |
| LNAV/VNAV DA | 828/60 | 532 (600-1¼) | | |
| LNAV MDA | 720/24 424 (500-½) | 720/40 424 (500-1) | 720/50 424 (500-1) | |
| CIRCLING | 940-1 628 (700-1) | 940-1¾ 628 (700-1¾) | 940-2 628 (700-2) | |



| | | |
|--|------------------------|--|
| WAAS CH 86310 W12A | APP CRS 121° | Rwy Idg 10501 TDZE 310 Apt Elev 312 |
|--|------------------------|--|

RNAV (GPS) RWY 12

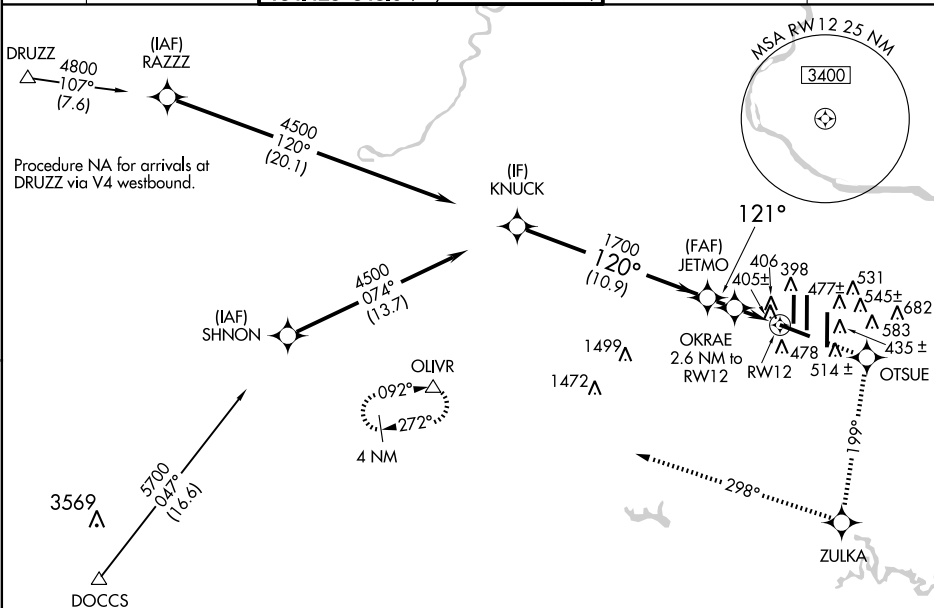
WASHINGTON DULLES INTL (IAD)

T For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.



MISSED APPROACH: Climb to 4000 direct OTSUE and via 199° track to ZULKA and right turn via 298° track to OLIVR and hold.

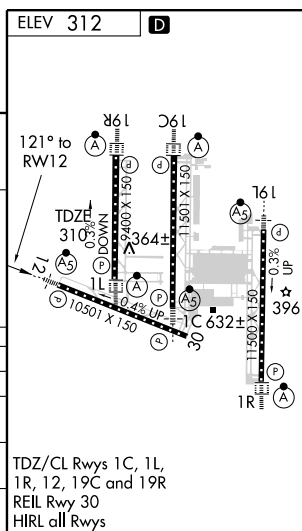
| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|



NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3. 21 OCT 2010 to 18 NOV 2010

| | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|



| | | | |
|--|------------------------|---|-------------|
| WAAS CH 86709 W19D | APP CRS 191° | Rwy Idg TDZE 278 Apt Elev 312 | 9400 |
|--|------------------------|---|-------------|

RNAV (GPS) RWY 19R

WASHINGTON DULLES INTL (IAD)

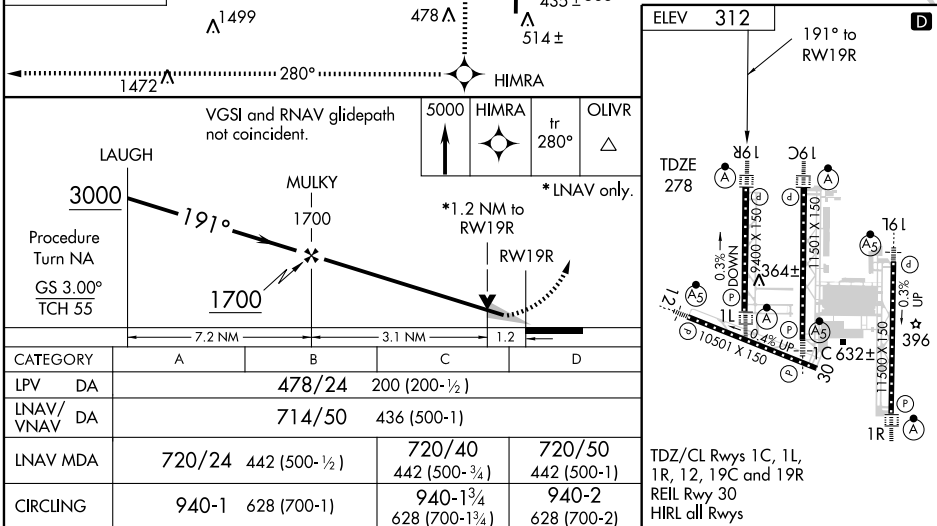
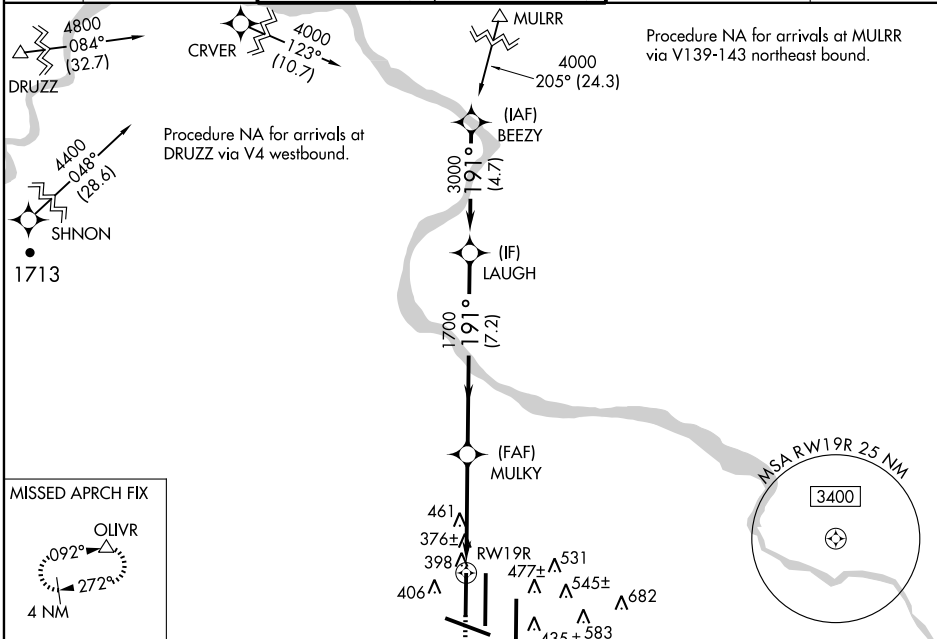
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA.

ALSF-2



MISSED APPROACH: Climb to 5000 direct HIMRA and via 280° track to OLIVR and hold, continue climb-in-hold to 5000.

| ATIS | POTOMAC APP CON | DULLES TOWER | | GND CON | CLNC DEL |
|---------------|-----------------------|---|----------------------------------|----------------------------|--------------------|
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) | 120.25 348.6 (Rwy 1C/19C) | 121.9 317.8 (EAST) | 135.7 317.8 |
| | | 134.425 348.6 (Rwy 1L/19R and 12/30) | | 132.45 348.6 (WEST) | |



| | | | |
|--|------------------------|---|--------------|
| WAAS CH 97509 W01B | APP CRS 011° | Rwy Idg TDZE 286 Apt Elev 312 | 11501 |
|--|------------------------|---|--------------|

RNAV (GPS) Y RWY 1C

WASHINGTON DULLES INTL (IAD)

▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

MALSR



MISSED APPROACH: Climb to 3000
direct BOYDS and hold.

ATIS
134.85

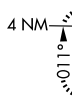
POTOMAC APP CON
120.45 306.925

DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwys 1L/19R and 12/30)

GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)

CLNC DEL
135.7 317.8

MISSED APCH FIX



1499 Δ
1472 Δ

GILBY Δ
187°
4000
(1.5.6)

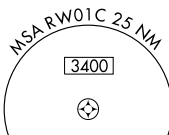
398 Δ
406 Δ
RW01C
478 Δ
477 Δ
531 Δ
545 Δ
435 Δ
583 Δ
682 Δ
514 Δ

2300
011° (1.9)
(FAF) SKINS
CARRY
2900
011° (5.7)

(IAF) KIESS

4000
101°
(5)

(IF) ERACE

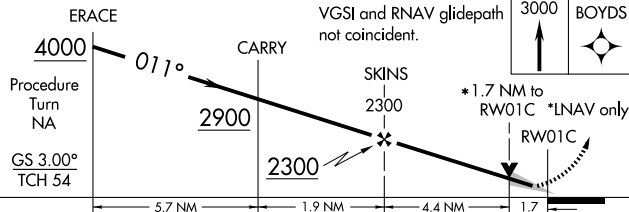


R-6608A

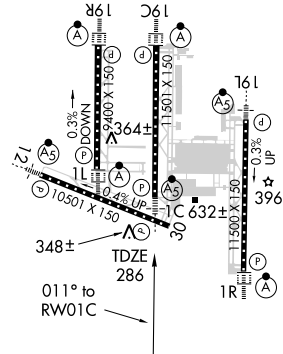
4000
183°
9
(IAF) BARIN

ELEV 312 **D**

TDZ/CL Rwys 1C, 1L, 1R,
12, 19C, and 19R
REIL Rwy 30
HIRL all Rwys



| CATEGORY | A | B | C | D |
|--------------|---------------------|---------------------|---------------------|---|
| LPV DA | 486/24 200 (200-½) | | | |
| LNAV/VNAV DA | 785/60 499 (500-1¼) | | | |
| LNAV MDA | 900/24 614 (600-½) | 900/60 614 (600-1¼) | 900-1½ 614 (600-1½) | |
| CIRCLING | 940-1 628 (700-1) | 940-1¾ 628 (700-1¾) | 940-2 628 (700-2) | |



| | | | |
|--|------------------------|-----------------------------|--|
| WAAS CH 56409 W01A | APP CRS 011° | Rwy Idg TDZE Apt Elev | 11500 312 312 |
|--|------------------------|-----------------------------|--|

RNAV (GPS) Y RWY 1R

WASHINGTON DULLES INTL (IAD)

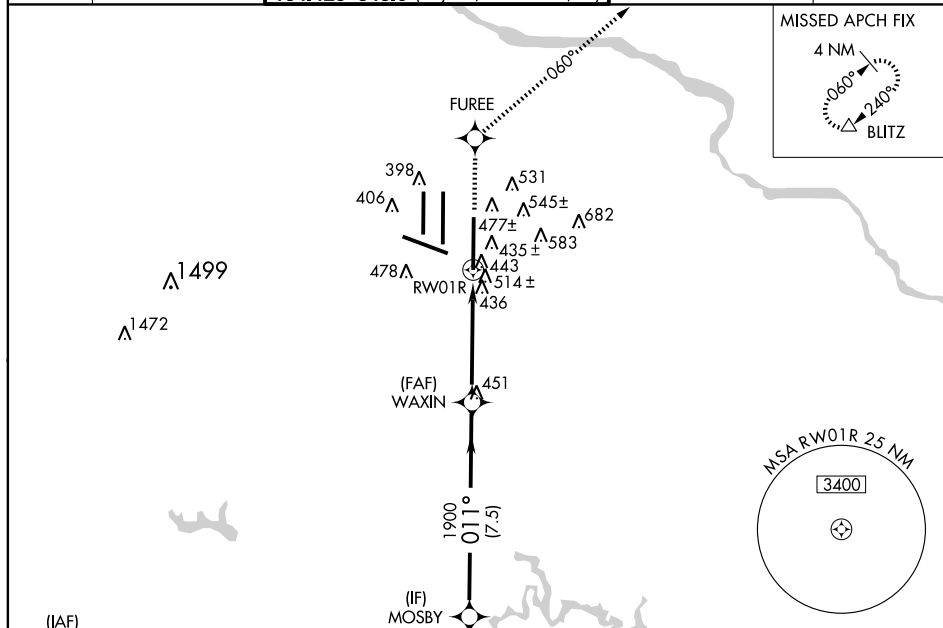
▼ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

ALSF-2

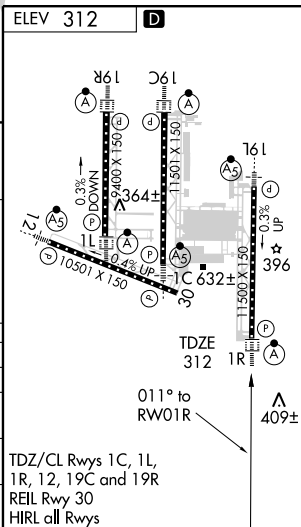


MISSED APPROACH: Climb to 3000
direct FUREE and via 060° track
to BLITZ and hold.

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|



| | | | | | | | |
|-------------------|--------------------|---|-------------|-------------|--------------------------------|---------|-------|
| MOSBY | | VGSi and RNAV glidepath not coincident. | | 3000 | FUREE | tr 060° | BLITZ |
| 3000 | | 011° | | 1900 | * 1.3 NM to RW01R * LNAV only. | | |
| Procedure Turn NA | | GS 3.00° TCH 53 | | | | | |
| 7.5 NM | | 3.5 NM | | 1.3 | | | |
| CATEGORY | A | B | C | D | | | |
| LPV DA | 512/24 200 (200-½) | | | | | | |
| LNAV/VNAV DA | 739/50 427 (500-1) | | | | | | |
| LNAV MDA | 800/24 | 488 (500-½) | 800/40 | 800/50 | | | |
| | | | 488 (500-¾) | 488 (500-1) | | | |
| CIRCLING | 940-1 | 628 (700-1) | 940-1¾ | 940-2 | | | |
| | | | 628 (700-¾) | 628 (700-2) | | | |



| | | | |
|--|------------------------|---|--------------|
| WAAS CH 40305 W19B | APP CRS 191° | Rwy Idg TDZE 272 Apt Elev 312 | 11501 |
|--|------------------------|---|--------------|

RNAV (GPS) Y RWY 19C

WASHINGTON DULLES INTL (IAD)

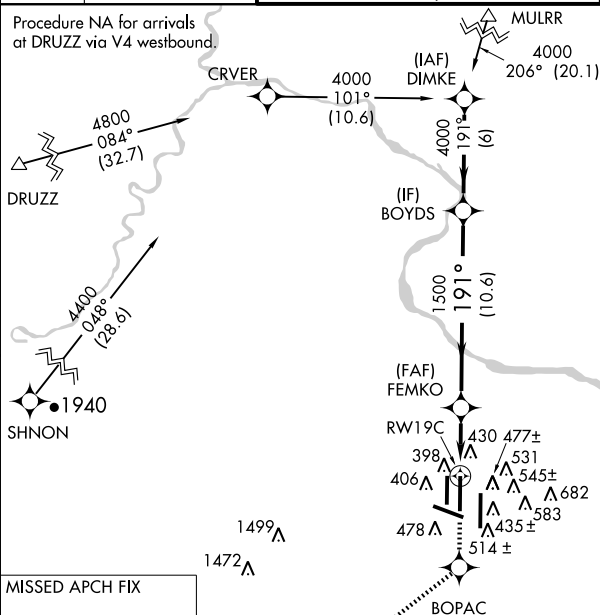
▼ For inoperative ALSF-2, increase LNAV Cat D visibility to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA
below -15°C (5°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.



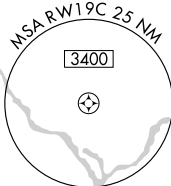
MISSED APPROACH: Climb to 4000
direct BOPAC and via 242° track to
CSN VORTAC and hold.

| ATIS | POTOMAC APP CON | DULLES TOWER | GND CON | CLNC DEL |
|---------------|-----------------------|---|---|--------------------|
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | 121.9 317.8 (EAST) 132.45 348.6 (WEST) | 135.7 317.8 |

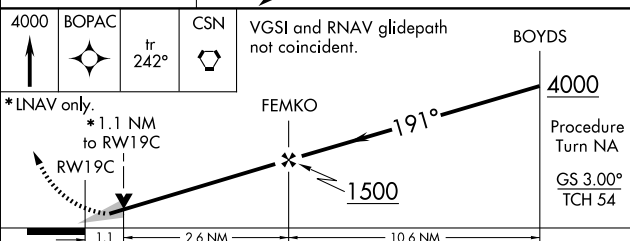
Procedure NA for arrivals
at DRUZZ via V4 westbound.



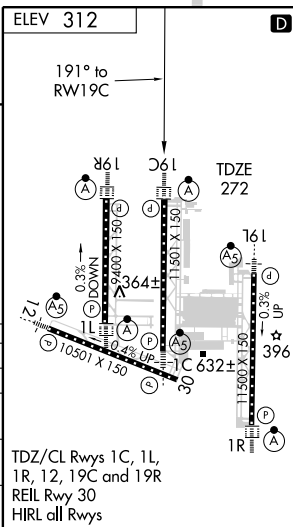
Procedure NA for arrivals at MULRR
via V139-143 northeast bound.



MISSED APCH FIX
4 NM
207°
027°
CASANOVA
CSN



| CATEGORY | A | B | C | D |
|--------------|--------------------|---|------------------------|-----------------------|
| LPV DA | 472/24 200 (200-½) | | | |
| LNAV/VNAV DA | 717/50 445 (500-1) | | | |
| LNAV MDA | 680/24 408 (400-½) | | 680/40 408 (400-¾) | 680/50 408 (400-1) |
| CIRCLING | 940-1 628 (700-1) | | 940-1¾ 628 (700-1¾) | 940-2 628 (700-2) |



| | | |
|--|------------------------|--|
| WAAS CH 58105 W19A | APP CRS 191° | Rwy Idg 11500 TDZE 302 Apt Elev 312 |
|--|------------------------|--|

RNAV (GPS) Y RWY 19L

WASHINGTON DULLES INTL (IAD)

T For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
DME/DME RNP-0.3 NA.

MALSR



MISSED APPROACH: Climb to 2000 direct WAXIN and hold.

ATIS
124.85

POTOMAC APP CON
100 45 206 225

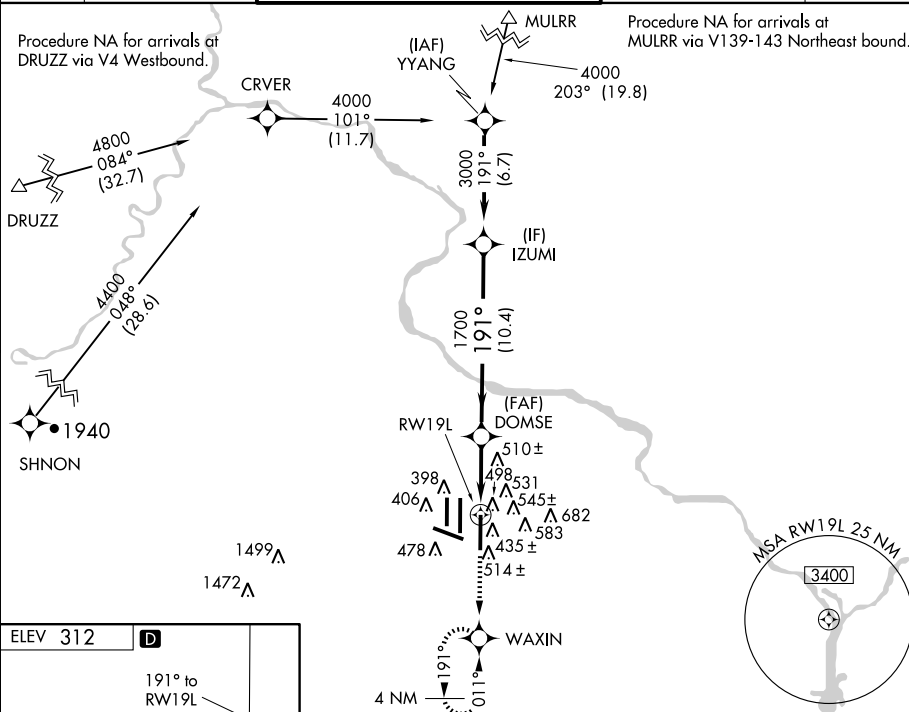
DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwys 1L/19R and 12/30)

GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)

CLNC DEL
135.7 317.8

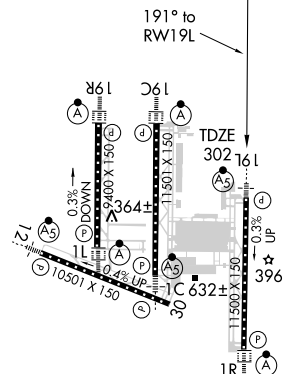
Procedure NA for arrivals at
DRUZZ via V4 Westbound.

Procedure NA for arrivals at MULRR via V139-143 Northeast bound



ELEV 312

D



TDZ/CL Rwy 1C, 1L,
1R, 12, 19C and 19R
REIL Rwy 30
HIRL all Rwy's

2000



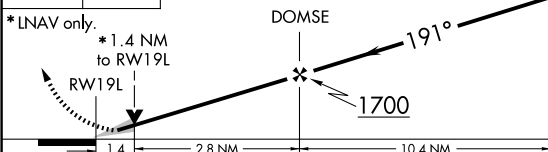
VGSI and RM

VGSI and RNAV glidepath not coincident

IZUMI

3000

Procedure
Turn NA
GS 3.00°
TCH 55



| CATEGORY | A | B | C | D |
|------------------|---------------------|---|------------------------|------------------------|
| LPV DA | 502/24 200 (200-½) | | | |
| LNAV/ VNAV DA | 829/60 527 (600-1¼) | | | |
| LNAV MDA | 820/24 518 (600-½) | | 820/50 518 (600-1) | 820/60 518 (600-1¼) |
| CIRCLING | 940-1 628 (700-1) | | 940-1¾ 628 (700-1¾) | 940-2 628 (700-2) |

WASHINGTON, DC

Amdt 2 10210

38°57'N-77°28'W

WASHINGTON DULLES INTL (TAD)

RNAV (GPS) Y RWY 19L

NE-3, 21 OCT 2010 to 18 NOV 2010

NE-3. 21 OCT 2010 to 18 NOV 2010

APP CRS **011°**
Rwy Idg **11501**
TDZE **286**
Apt Elev **312**

RNAV (RNP) Z RWY 1C

WASHINGTON DULLES INTL (IAD)



GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (6°F) or above 48°C (119°F). For operative ALSF-2, increase RNP 0.30 visibility to 1¾.

MALSR



MISSED APPROACH: Climb to 5000 via track 011° to WASMA and left turn direct HARPP and hold.

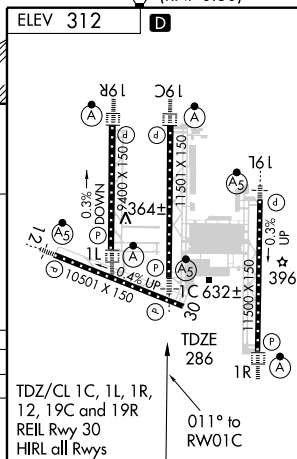
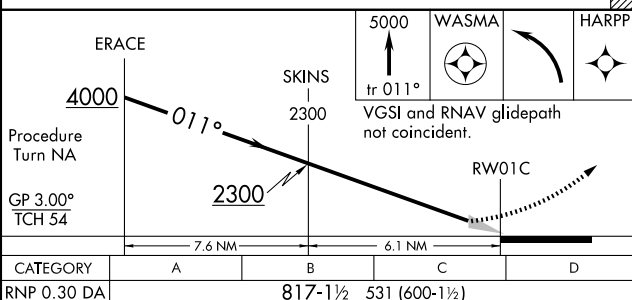
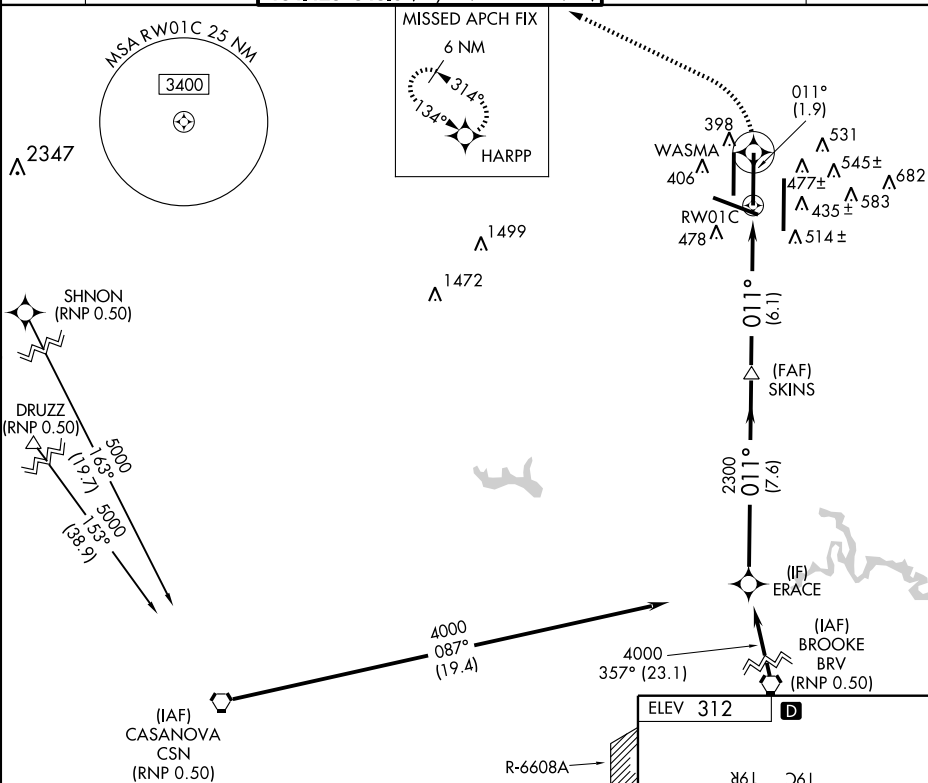
ATIS
134.85

POTOMAC APP CON
120.45 306.925

DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwys 1L/19R and 12/30)

GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)

CLNC DEL
135.7 317.8



**SPECIAL AIRCRAFT & AIRCREW
AUTHORIZATION REQUIRED**

RNAV (RNP) Z RWY 1R
WASHINGTON DULLES INTL (IAD)

CLNC DEL
135.7 317.8



APP CRS **191°**
 Rwy Idg **11501**
 TDZE **272**
 Apt Elev **312**

RNAV (RNP) Z RWY 19C

WASHINGTON DULLES INTL (IAD)

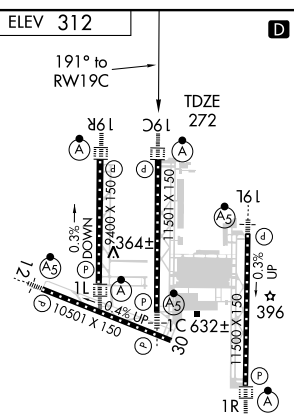
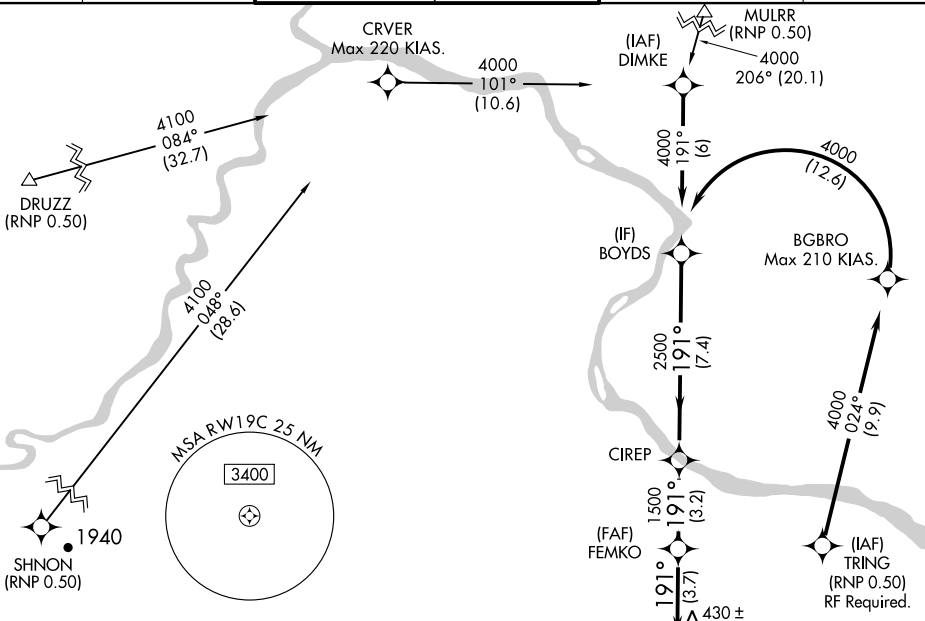
GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (6°F) or above 47°C (117°F). For inoperative ALSF, increase RNP 0.30 visibility to 1¾.

ALSF-2

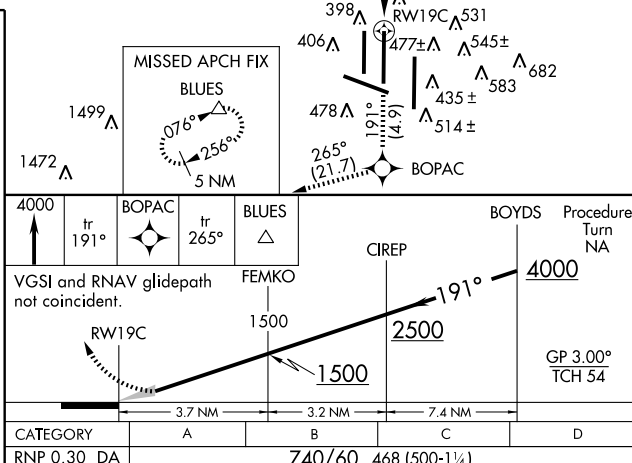


MISSED APPROACH: Climb to 4000 via track 191° to BOPAC and via track 265° to BLUES and hold.

| ATIS | POTOMAC APP CON | DULLES TOWER | GND CON | CLNC DEL |
|---------------|-----------------------|---|---|--------------------|
| 134.85 | 120.45 306.925 | 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | 121.9 317.8 (EAST) 132.45 348.6 (WEST) | 135.7 317.8 |



TDZ/CL 1C, 1L, 1R, 12,
 19C and 19R
 REIL Rwy 30
 HIRL all Rwys



| CATEGORY | A | B | C | D |
|-------------|--------|--------------|---|---|
| RNP 0.30 DA | 740/60 | 468 (500-1¼) | | |

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

| | | |
|---------|----------|-------|
| APP CRS | Rwy ldg | 11500 |
| 191° | TDZE | 302 |
| | Apt Elev | 312 |

RNAV (RNP) Z RWY 19L
WASHINGTON DULLES INTL (IAD)

T GPS required. For uncompensated Baro-VNAV systems, procedure NA below -14°C (6°F) or above 47°C (118°F). For inoperative MALSR, increase RNP 0.30 visibility to 1½.

MALSR

MISSED APPROACH: Climb to 2000
via track 191° to WAXIN and hold.

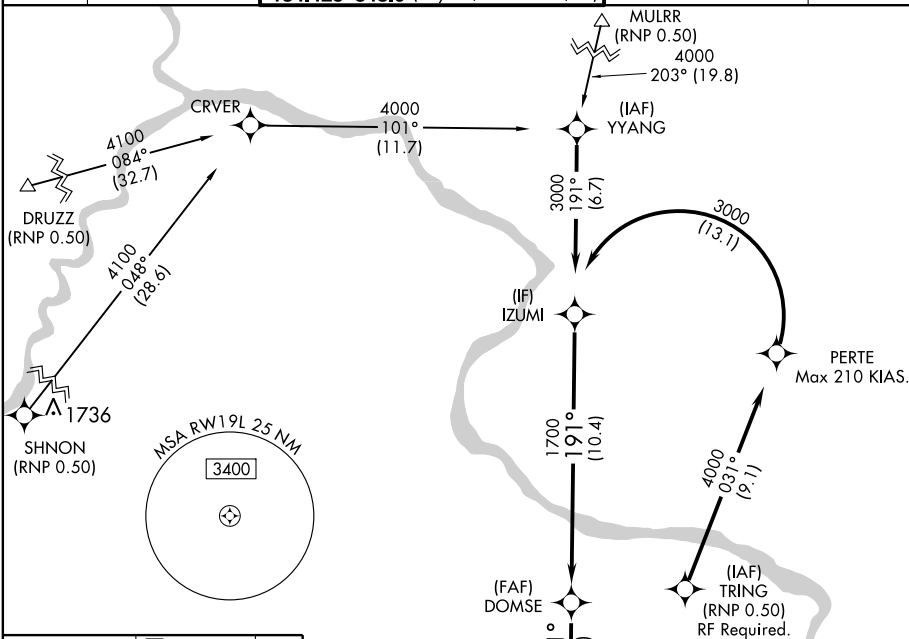
ATIS
134.85

POTOMAC APP CON
120.45 306.925

DULLES TOWER
120.1 317.8 (Rwy 1R/19L)
120.25 348.6 (Rwy 1C/19C)
134.425 348.6 (Rwys 1L/19R and 12/30)

GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)

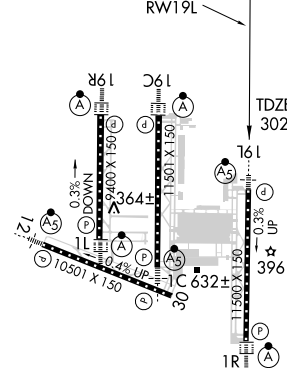
CLNC DEL
135.7 317.8



ELEV 312

D

191° to



TDZ/CL 1C, 1L, 1R, 12,
19C and 19R
REIL Rwy 30
HIRL all Rwy's

2000

| tr | |

WAXIN

VGSI and RNAV glidepath not coincident.

RW

DOMS

700

| | |
|-------|-----------|
| IZUMI | Procedure |
| 1 | Turn |
| | NA |

GP 3

TCH

| CATEGORY |
|-------------|
| RNP 0.30 DA |

A

1

B

1

| | |
|--|--|
| | |
|--|--|

1

C

1

| | |
|--|--|
| | |
|--|--|

1

1

1

1

**SPECIAL AIRCRAFT & AIRCREW
AUTHORIZATION REQUIRED**

WASHINGTON, DC
Orig-A 22OCT09

38°57'N-77°28'W

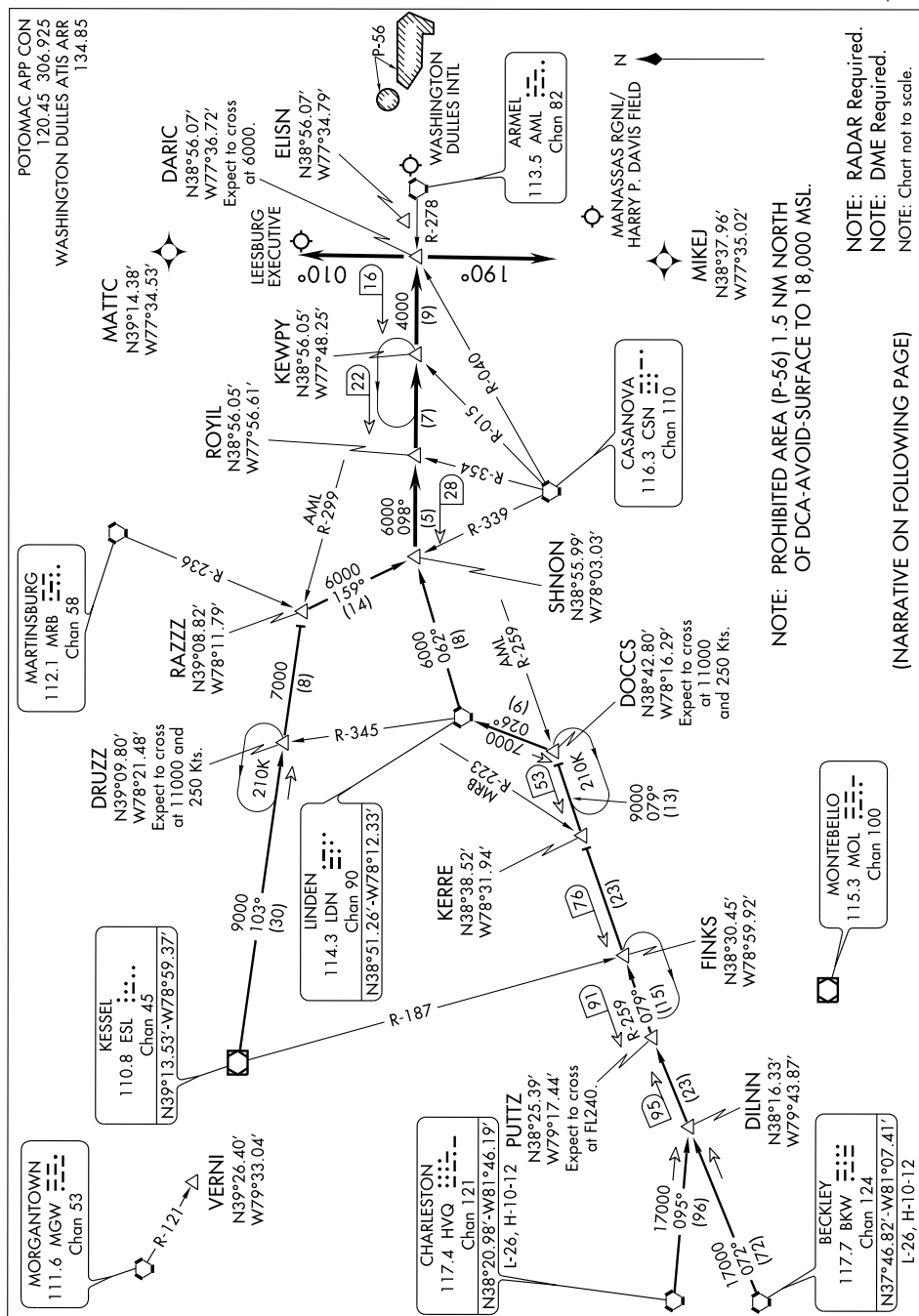
WASHINGTON DULLES INTL (IAD)
RNAV (RNP) Z RWY 19L

NE-3, 21 OCT 2010 to 18 NOV 2010

ROYIL TWO ARRIVAL

WASHINGTON, DC

NE-3, 21 OCT 2010 to 18 NOV 2010



(NARRATIVE ON FOLLOWING PAGE)

NE-3, 21 OCT 2010 to 18 NOV 2010

ROYIL TWO ARRIVAL

WASHINGTON, DC

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.ROYIL2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-062 to SHNON INT, thence

CHARLESTON TRANSITION (HVQ.ROYIL2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-062 to SHNON INT, thence

KESSEL TRANSITION (ESL.ROYIL2): From over ESL VOR/DME via ESL R-103 to RAZZZ INT, then via CSN R-339 to SHNON INT, thence

. . . . from over SHNON INT via AML R-278 to ROYIL INT, then via AML R-278 to KEWPY INT, then via AML R-278 to DARIC INT.


LANDING SOUTH (IAD ONLY): Depart DARIC heading 010° for vectors to final approach course.


LANDING NORTH (IAD ONLY): Depart DARIC heading 190° for vectors to final approach course.

SELINGSGROVE THREE ARRIVAL

POTOMAC APP CON

126.1 338.25
DULLES ATIS
134.85


WILLIAMSPORT
114.4 FQM 
Chan 91
N41°20.31' - W76°46.49'
L-30, H-10-12

MILTON
109.2 MIP 
Chan 29


DIANO
N41°00.03' - W76°13.56'
MAA 17500
5000
246
(29)

PHILIPSBURG
115.5 PSB 
Chan 102

WATSO
N41°02.77' - W76°50.00'

WILKES-BARRE
111.6 LVZ 
Chan 53
N41°16.37' - W75°41.37'
L-33, H-10-12


BLESS
N40°56.35' - W76°25.21'


SELINGSGROVE
110.4 SEG 
Chan 41
N40°47.45' - W76°53.04'

LEGGO
N40°17.27' - W77°02.43'

HYPER
N39°41.04' - W77°13.51'

PRTZL
N40°04.34' - W77°06.40'

LANCASTER
117.3 LRP 
Chan 120

MARTINSBURG
112.1 MRB 
Chan 58

NOTE: For non-turbojet aircraft capable of 180 KIAS or greater.

NOTE: Radar required.

P-40
R-4009
R-065

WESTMINSTER
117.9 EMI 
Chan 126

MULRR
N39°37.89' - W77°20.14'
Expect to cross at 8000 and 250 KIAS.

NOTE: Chart not to scale.

WILKES-BARRE TRANSITION (LVZ.SEG3):

From over LVZ VORTAC via LVZ R-246 and SEG R-075 to SEG VORTAC. Thence....

WILLIAMSPORT TRANSITION (FQM.SEG3):

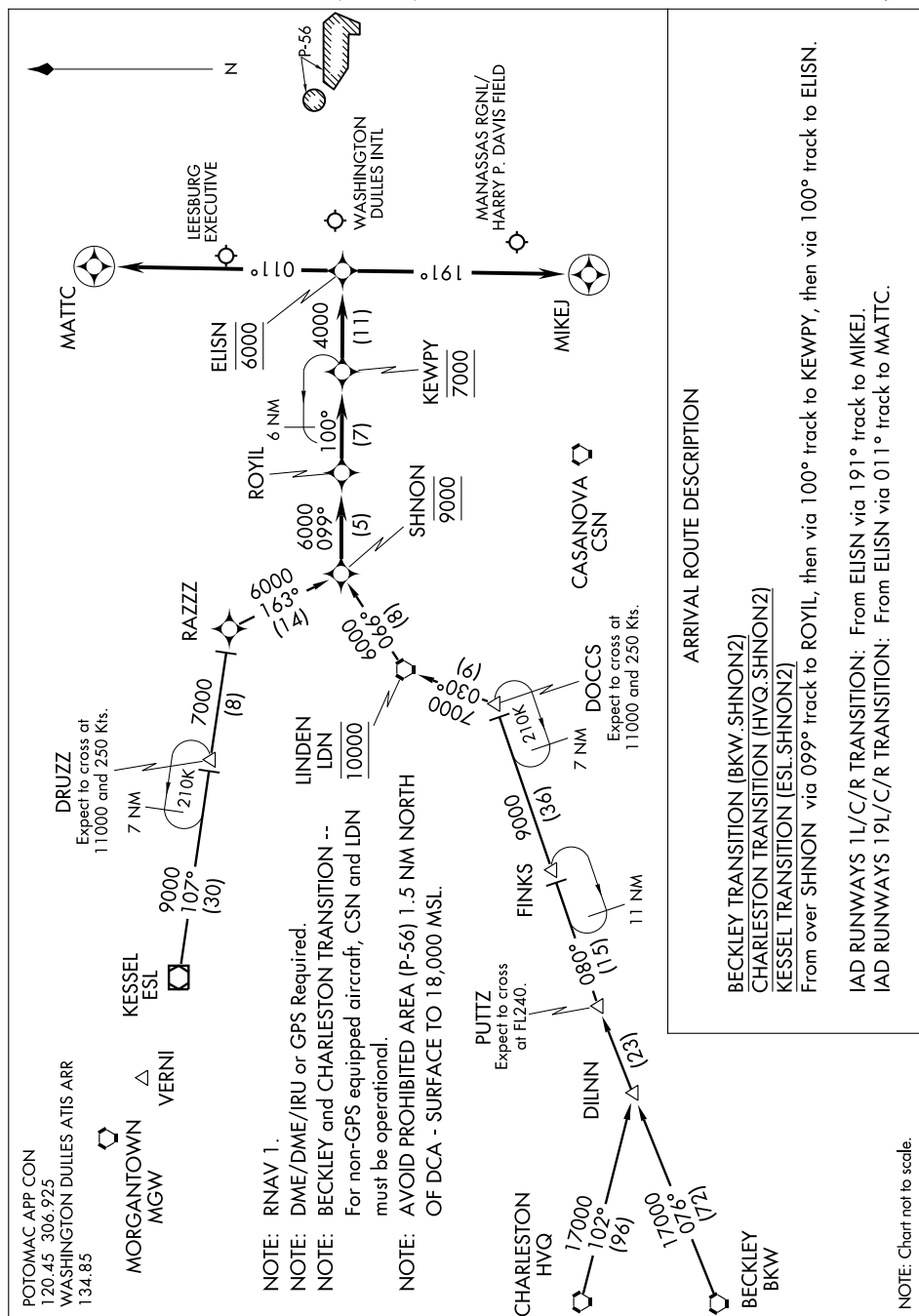
From over FQM VOR/DME via FQM R-198 and SEG R-017 to SEG VORTAC. Thence....

....From over SEG via SEG R-201 to LEGGO, then via SEG R-201 to PRTZL, then via SEG R-201 to HYPER, then via MRB R-065 to MULRR, then via AML R-016 to AML. Expect radar vectors to final approach course.

SELINGSGROVE THREE ARRIVAL

SHNON TWO ARRIVAL (RNAV)

WASHINGTON, DC



SHNON TWO ARRIVAL (RNAV)

(SHNON.SHNON2) 09183

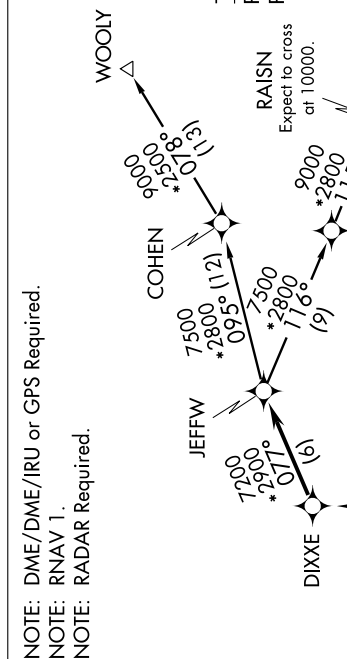
WASHINGTON, DC

STOIC TWO DEPARTURE (RNAV)

ATIS
134.85
CLNC DEL
135.7 317.8
GND CON
121.9 317.8 (EAST)
132.45 348.6 (WEST)
DULLES TOWER
(Rwy 1R/19L)
120.1 317.8
(Rwy 1C/19C)
120.25 348.6
(Rwys 1L/19R, 12/30)
134.425 348.6
POTOMAC DEP CON (NORTH)
125.05 350.2

TAKE-OFF MINIMUMS
Rwy 12: NA - Air Traffic.
Rwys 1C, 1R, 1L, 19C, 19L, 19R, 30: Standard.

NOTE: DME/DME/IRU or GPS Required.
NOTE: RNAV 1.
NOTE: RADAR Required.



STOIC TWO DEPARTURE (RNAV)

(STOIC2.STOIC) 10098

SL-5100 (FAA)

WASHINGTON DULLES INTL (IAD)
WASHINGTON, DC

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWYS 1C, 1R, 1L, 19C, 19L, 19R, 30: Climb on assigned heading for radar vectors to STOIC, then via 010° track to DIXXE, 077° track to JEFFW, Thence . . .
. . . via (transition). Maintain 3000, expect clearance to filed altitude/flight level 10 minutes after departure.

DAILY TRANSITION (STOIC2.DAILY)
PALEO TRANSITION (STOIC2.PALEO)
SWANN TRANSITION (STOIC2.SWANN)
WOOLY TRANSITION (STOIC2.WOOLY)

TAKE-OFF OBSTACLES
Rwy 1L: Tower 1918' from DER, 680' left of centerline, 56' AGL/330' MSL.
Rwy 1C: Tree 2814' from DER, 1030' left of centerline, 86' AGL/345' MSL.
Rwy 1R: Post 12' from DER, 223' right of centerline, 8' AGL/294' MSL.
Rwy 30: Trees beginning 161' from DER, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from DER, 600' right of centerline, up to 64' AGL/383' MSL.

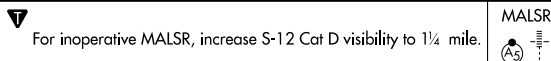
NOTE: Chart not to scale.

NE-3, 21 OCT 2010 to 18 NOV 2010

WASHINGTON, DC
WASHINGTON DULLES INTL (IAD)

| | | |
|--|------------------------|--|
| VORTAC AML 113.5 Chan 82 | APP CRS 120° | Rwy Idg 10501 TDZE 310 Apt Elev 312 |
|--|------------------------|--|

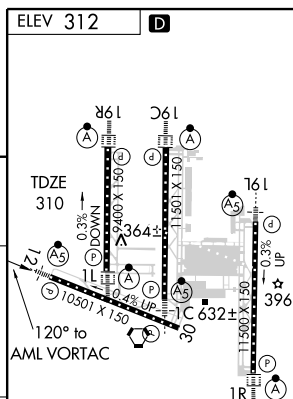
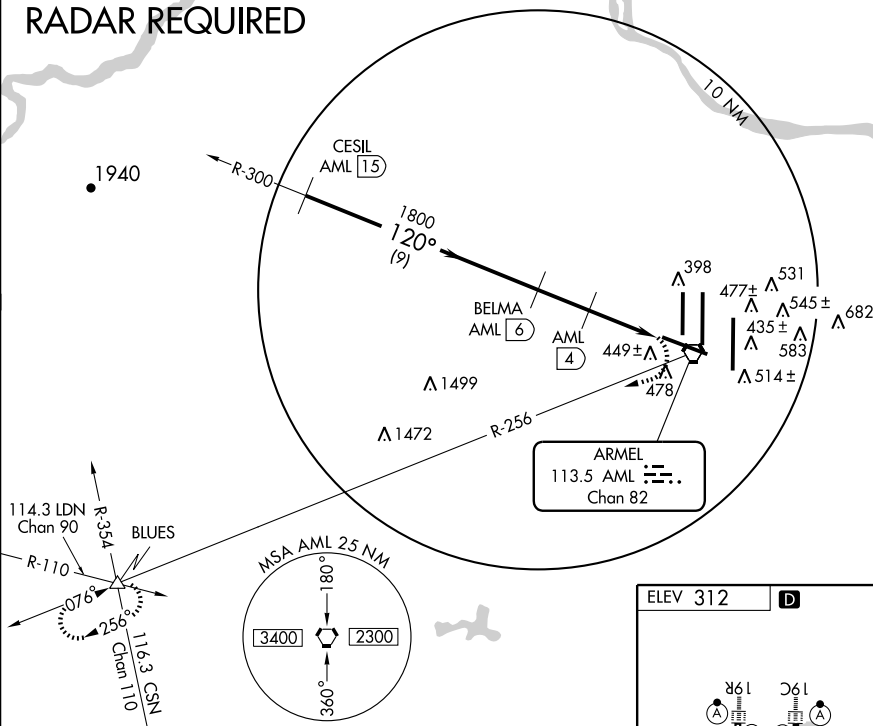
VOR/DME or TACAN RWY 12
WASHINGTON DULLES INTL (IAD)

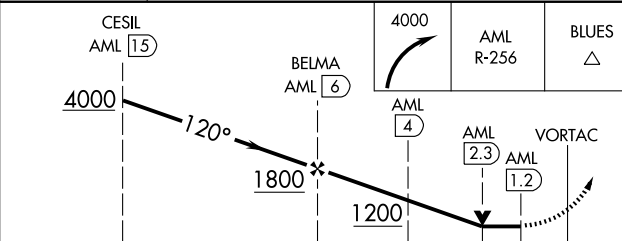


MISSED APPROACH: Climbing right turn to 4000 via AML R-256 to BLUES INT and hold.

| | | | | |
|-----------------------|--|---|--|--------------------------------|
| ATIS 134.85 | POTOMAC APP CON 120.45 306.925 | DULLES TOWER 120.1 317.8 (Rwy 1R/19L) 120.25 348.6 (Rwy 1C/19C) 134.425 348.6 (Rwys 1L/19R and 12/30) | GND CON 121.9 317.8 (EAST) 132.45 348.6 (WEST) | CLNC DEL 135.7 317.8 |
|-----------------------|--|---|--|--------------------------------|

RADAR REQUIRED



| | | | | |
|---|--------------------|---|------------------------|-----------------------|
|  <p>CESIL AML 15</p> <p>4000</p> <p>120°</p> <p>BELMA AML 6</p> <p>1800</p> <p>4000</p> <p>AML 4</p> <p>AML 2.3</p> <p>AML 1.2</p> <p>VORTAC</p> <p>9 NM</p> <p>2 NM</p> <p>1.7 NM</p> <p>1.1</p> | | | | |
| CATEGORY | A | B | C | D |
| S-12 | 700/24 390 (400-½) | | | 700/50 390 (400-1) |
| CIRCLING | 820-1 508 (600-1) | | 840-1½ 528 (600-1½) | 880-2 568 (600-2) |

TDZ/CL 1C, 1L, 1R, 12,
19C and 19R
REIL Rwy 30
HIRL all Rwys